

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. In 2008 AINSE Limited was registered with ASIC and took over the operations of The Australian Institute of Nuclear Science and Engineering Inc in January 2010. The Australian Institute of Nuclear Science and Engineering Inc was wound up in mid 2010. The Company 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 Australian Nuclear Science and Technology Organisation (ANSTO) 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
- excellence in impact

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

- **Goal 1**
By the end of 2013, members will be making appropriate and effective use of the facilities at ANSTO.
- **Goal 2**
By the end of 2013, AINSE's research performance will have increased by 10% on the 2008 performance as measured by the number of high quality publications.
- **Goal 3**
By the end of 2013, all universities active in scientific research in Australasia and a number of other scientific institutes in Australasia will be members of AINSE.
- **Goal 4**
By the end of 2013, AINSE's scientific networks will have expanded.
- **Goal 5**
By the end of 2013, AINSE will be making a substantial contribution to highly rated research groups at universities and at ANSTO.

Contact AINSE Ltd

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Managing Director

Dr Dennis Mather

ABN 18 133 225 331

AINSE Council 2010

Member Organisations and Representation at Council

2 Council Meetings were held in 2010

Organisation	Membership Commenced	Councillor	Meetings Attended
ANSTO, Bragg Institute	1958	Dr Robert Robinson	2
ANSTO, Institute for Environmental Research		Professor John Dodson	2
ANSTO, Institute for Materials Engineering		Professor Lyndon Edwards	1
ANSTO, Radiopharmaceutical Research Institute		Dr Ron Weiner	0
The University of Queensland	1958	Professor Anton Middelberg	1
The University of New England	1958	Professor Annabelle Duncan	1
The University of Sydney	1958	Professor Brendan Kennedy	2
The University of New South Wales	1958	Professor Rob Burford	2
The Australian National University	1958	Professor Keith Fifield	1
The University of Melbourne	1958	Professor Jim Camakaris	1
University of Tasmania	1958	Professor Allan Canty	1
The University of Adelaide	1958	Professor John Carver	2
The University of Western Australia	1958	A/Professor Jasmine Henry	2
Monash University	1961	Professor Rob Norris	1
The University of Newcastle	1965	Professor Bruce King, President	2
Flinders University	1966	Professor Claire Lenehan	2
La Trobe University	1966	A/Professor John Webb	0
Macquarie University	1966	Professor James Piper	0
James Cook University	1970	Professor Richard Keene	0
University of Wollongong	1975	Professor Allan Chivas	2
Griffith University	1975	Professor Greg Hope	2
Murdoch University	1985-1997 rejoined 1998	Dr Danielle Meyrick	2
University of Technology, Sydney	1988	Professor Greg Skilbeck	2
RMIT University	1988	Professor Suresh Bhargava	2
Curtin University of Technology	1989	Professor Craig Buckley	1
CQUniversity	1991	A/Professor David Druskovich	2
University of South Australia	1991	Professor Namita Choudhury	1
Swinburne University of Technology	1991	Dr Anthony Bartel	1
Queensland University of Technology	1992	A/Professor Godwin Ayoko	2
University of Western Sydney	1993	Professor Andrew Cheetham	2
Victoria University	1994	Professor Michelle Towstoless	0
Southern Cross University	1994	Professor Bill Boyd	1
The University of Auckland	1995	Professor Jim Metson	2
Charles Sturt University	1995	A/Professor Ian Lunt	0
Charles Darwin University	1995	Professor Jim Mitroy	1
Edith Cowan University	1996	Professor Tony Watson	1
University of Canberra	1996	Professor Bill Maher	0
The University of Southern Queensland	1996	Professor Joachim Ribbe	1
Deakin University	1997	Professor Bronwyn Fox	1
University of Ballarat	1997	Professor Peter Gell	2
Australian Catholic University	2001	Dr Brian Bicknell	1

Organisation	Commenced	Councillor	Meetings Attended
University of Canterbury	2005	A/Professor Greg Russell	0
GNS Science	2005	Dr Frank Bruhn	2
University of Otago	2007	Professor Gary Wilson	1
University of the Sunshine Coast	2010	Professor Roland De Marco	1
CSIRO	2010	Dr Patrick Hartley	1
Victoria University of Wellington	2010	Professor Charles Daugherty	0
AINSE		Dr Dennis Mather	2
Alternate Representatives and other attendees			
ANSTO Life Sciences		Dr Ron Weiner (e)	1
University of Canterbury		Dr Vladimir Golovko	1
University of Canterbury		Professor Brian Storey	1
Curtin University of Technology		Professor Roland De Marco	1
Edith Cowan University		A/Professor Stephen Hinckley	1
James Cook University		A/Professor Scott Smithers	1
Southern Cross University		Dr Malcolm Clark	1
University of Southern Queensland		Ms Katrina Hall	1
Victoria University		Professor Stephen Biggers	2

Executive Committee

Four Executive Committee Meetings were held in 2010

Councillor	Office/Position	Organisation	Meetings Attended
Professor Bruce King	President	University of Newcastle	4
Professor Brendan Kennedy	Vice – President	The University of Sydney	3
Professor Andrew Cheetham		University of Western Sydney	4
Professor Allan Chivas	Past President	The University of Wollongong	2
Dr Ron Weiner		ANSTO	4
Dr Robert Robinson		ANSTO	3
Professor Lyndon Edwards		ANSTO	3
Professor John Dodson		ANSTO	3
Dr Dennis Mather		AINSE	4

AINSE Staff

Managing Director Dr Dennis Mather

Secretariat

Ms Gillian Blackburn
Miss Rhiannon Still (to September)
Mrs Sandy O'Connor (part-time)
Mrs Nerissa Phillips (part-time)
Mr John Studdert (part - time)

Specialist Committees for 2010

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

Archaeology and Geosciences Committee

Professor James Schulmeister, Convenor	University of Queensland
Dr Paul Hesse	Macquarie University
Professor Keith Fifield (c)	Australian National University
Dr Sean Ulm	University of Queensland
Dr Quan Hua	ANSTO
Dr David Fink	ANSTO

Biomedical Science and Biotechnology Committee

Dr Michael Davies, Convenor	The University of Sydney
Professor Les Copeland	The University of Sydney
A/Professor Lawrence Gahan	University of Queensland
A/Professor Michael Kassiou	The University of Sydney
Dr Damian Myers	The University of Melbourne
Dr Ivan Greguric	ANSTO
Dr Andrew Katsifis	ANSTO

Environmental Sciences Committee

Dr Eric Bestland, Convenor	Flinders University
Dr Pauline Grierson	University of Western Australia
Professor Peter Gell (c)	University of Ballarat
Dr Scott Nicol	Geoscience Australia
Dr Rainer Siegele	ANSTO
Dr Dioni Cendon Sevilla	ANSTO

Materials - Structures and Dynamics Committee

Professor Anton Middelberg (c), Convenor	University of Queensland
Professor Roland De Marco	Curtin University of Technology
A/Professor Gary Bryant	RMIT University
Professor John White	Australian National University
Professor Don Kearley	ANSTO
Dr Shane Kennedy	ANSTO

Materials - Properties and Engineering Committee

Professor Robert Burford (c), Convenor	University of New South Wales
Professor Michael Cortie	University of Technology, Sydney
Professor Roger Lewis	University of Wollongong
Dr Leigh Sheppard	University of Western Sydney
Dr David Cohen	ANSTO
Professor Lyndon Edwards	ANSTO

Conference Planning Committees

AANSS 2010: 9th AINSE/ANBUG Neutron Science Symposium

Dr Darren Goossens, Conference Chair	The Australian National University
Dr Sergey Danilkin	Bragg Institute
Dr Duncan McGillivray	University of Auckland
Dr Wayne Hutchison	ADFA@UNSW
Dr Annemieke Mulders	Curtin University
A/Professor Trevor Finlayson	University of Melbourne
Dr Dennis Mather	AINSE
Ms Rhiannon Still	AINSE

3rd ANSTO/AINSE Neutron School

Dr Michael James	ANSTO
Professor Don Kearley	ANSTO
Dr Andrew Studer	ANSTO
Ms Laura Mackaway	ANSTO
Ms Donna Freeman	ANSTO
Ms Rhiannon Still	AINSE
Dr Dennis Mather	AINSE

Winter School Committee

Dr Danielle Meyrick, Convenor	Murdoch University
Dr Vladimir Golovko	University of Canterbury
A/Professor Gerald Laurence	University of Adelaide
Professor Thomas Millar	University of Western Sydney
Dr Tamim Darwish	Bragg, ANSTO
Dr Andrew Studer	Bragg, ANSTO
Ms Daniela Fierro	IER, ANSTO
Mr Jack Goralewski	IER, ANSTO
Dr Henk Heijnis	IER, ANSTO
Dr Mihail Ionescu	IER, ANSTO
Dr Stephan Winkler	IER, ANSTO
Ms Atun Zawadzki	IER, ANSTO
Ms Connie Banos	ERS, ANSTO
Ms Linda McCarthy	ERS, ANSTO
Mr Sohil Sheth	ERS, ANSTO
Dr Gordon Thorogood	IME, ANSTO
Dr Karl Whittle	IME, ANSTO
Dr Dennis Mather	AINSE
Ms Rhiannon Still	AINSE
Mr John Studdert	AINSE (Minute Secretary)

Research Fellowship Committee

Professor John White	The Australian National University
Professor Allan Chivas	University of Wollongong
Professor Andrew Cheetham	University of Western Sydney
Dr Robert Robinson	ANSTO, Bragg Institute
Dr Ron Weiner	ANSTO, Life Sciences
Professor John Dodson	ANSTO, Institute for Environmental Research

Directors' Report

For the Financial Year Ended 31 December 2010

Your Directors present their report on the Company for the financial year ended 31 December 2010.

Directors

The names of Directors in office at any time during or since the end of the year are:

Bruce King	Brendan Kennedy
Allan Chivas	Andrew Cheetham
John Dodson	Lyndon Edwards
Robert Robinson	Dennis Mather
Ron Weiner (appointed 7/05/10)	John White (resigned 23/04/10)

Directors have been in office since the start of the financial year to the date of this report unless otherwise stated.

Principal Activities

The principal activity of the Company during the financial year was to provide access to research facilities to Universities and other tertiary institutions within Australia in the field of Nuclear Science and Engineering.

There were no significant changes in the nature of the Company's principal activity during the financial year.

Operating Results

The loss of the Company for the financial year amounted to \$198,831.

Dividends Paid or Recommended

No dividends were paid or declared since the start of the financial year. No recommendation for payment of dividends has been made.

Significant Changes in State of Affairs

No significant changes in the Company's state of affairs occurred during the financial year, other than those matters already disclosed within this report.

Review of Operations

The Company commenced trading on 1 January 2009. The Company was incorporated in order to take over the activities of AINSE Inc. Further information regarding the operations of the Company are provided in the Annual Report – Section 2.

After Balance Date Events

No matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Company, the results of those operations, or the state of affairs of the Company in future financial years.

Future Development

The Company expects to maintain the present status and level of operations and hence there are no likely developments in the operations in future financial years.

Environmental Issues

The Company's operations are not regulated by any significant environmental regulation under a law of the Commonwealth or of a state or territory.

Options

The Company is a company limited by guarantee and therefore is restricted from issuing any options. No options over unissued shares or interests in the entity were granted during or since the end of the financial year and there were no options outstanding at the date of this report.

Information on Directors

The Directors in office at the date of this report are listed below with particulars of qualifications, experience and special responsibilities (if any).

Bruce King – President Board Member since 2008 Directors Meetings Attended: 4 over 25 years experience in academia and scientific research in Australia BSc BE(Hons) PhD	Brendan Kennedy – Vice President Board Member since 2009 Directors Meetings Attended: 3 25 years experience as an academic in scientific research BEd, PhD
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Directors' Report

For the Financial Year Ended 31 December 2010

Allan Chivas – Board Member
Board Member since 2008
Directors Meetings Attended: 2
34 years experience as an academic in scientific research
BSc, PhD

John Dodson – Board Member
Board Member since 2008
Directors Meetings Attended: 3
30 years experience as an academic in Australia, New Zealand and UK
PhD

Robert Robinson – Board Member
Board Member since 2008
Directors Meetings Attended: 3
28 years experience in scientific research and academia
MA, PhD

Dennis Mather – Managing Director
Board Member since 2008
Directors Meetings Attended: 4
Directors Meetings Held: 4
19 years experience in association management
BSc(hons), PhD, Dip Ed

The following Directors ceased to hold office during the year:

Andrew Cheetham – Board Member
Board Member since 2009
Directors Meetings Attended: 4
34 years experience in academia and scientific research
BSc(hons), PhD, GAICD

Lyndon Edwards – Board Member
Board Member since 2008
Directors Meetings Attended: 3
27 years experience in academia and scientific research
MA, DPhil(Oxon), FIMMM, CEng

Ron Weiner – Board Member
Board Member since 2010
Directors Meetings Attended: 3
25 years experience in academia and scientific research
PhD

There were 4 Directors Meetings Held in 2010
Ron Weiner was a Director at the last 3

	No. of Meetings Held	No. of Meetings Attended
John White	1	0

Indemnifying Officer or Auditor

No indemnities have been given or insurance premiums paid, during or since the end of the financial year, for any person who is or has been an officer or auditor of the Company with the exception of the following:

During or since the financial year the Company has paid premiums to insure all Directors against liabilities for costs and expenses incurred by them in defending any legal proceedings arising out of their conduct while acting in the capacity of director of the Company, other than conduct involving a wilful breach of duty in relation to the Company. The amount of the premium was \$5,277 for Association Liability Policy.

Proceedings on Behalf of the Entity

No person has applied for leave of Court to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party for the purpose of taking responsibility on behalf of the Company for all or any part of those proceedings.

The Company was not a party to any such proceedings during the year.

Auditors Independence Declaration

The lead auditor's independence declaration for the year ended 31 December 2010 has been received and can be found on page 10 of the report.

Signed in accordance with a resolution of the Board of Directors.



Director

Dated this ninth day of March, 2011



Director

Auditor's Independence Declaration to the Directors of AINSE Ltd

For the Financial Year Ended 31 December 2010

I declare that, to the best of my knowledge and belief, during the year ended 31 December 2010 there have been:

- (i) no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and
- (ii) no contraventions of any applicable code of professional conduct in relation to the audit.

Escott Aston
Chartered Accountants
291 Belmore Road
Riverwood NSW 2210

A handwritten signature in black ink, appearing to read "David G Aston".

David G Aston
Partner

Dated this 24th day of February, 2011.

Balance Sheet

for the year ended 31 December 2010

	Notes	31-Dec-10 \$	31-Dec-09 \$
Current Assets			
Cash	2	103,418	83,691
Trade and Other Receivables	3	150,265	130,943
Investments	4	3,975,117	4,149,215
Other	5	55,487	37,656
Total Current Assets		<u>4,284,287</u>	<u>4,401,505</u>
Non-Current Assets			
Plant and Equipment	6	36,816	33,677
Total Non-Current Assets		<u>36,816</u>	<u>33,677</u>
Total Assets		<u>4,321,103</u>	<u>4,435,182</u>
Current Liabilities			
Trade and Other Payables	7	1,995,190	1,908,229
Total Current Liabilities		<u>1,995,190</u>	<u>1,908,229</u>
Non-Current Liabilities			
Provisions for Employee Entitlements	8	3,411	5,620
Total Non-Current Liabilities		<u>3,411</u>	<u>5,620</u>
Total Liabilities		<u>1,998,601</u>	<u>1,913,849</u>
NET ASSETS		<u>2,322,502</u>	<u>2,521,333</u>
Equity			
Awards Reserve	14	2,760,000	2,027,271
Long Term Projects Reserve	14	500,000	500,000
Accumulated results of operations		(937,498)	(5,938)
TOTAL EQUITY		<u>2,322,502</u>	<u>2,521,333</u>

Income and Expenditure Statement

for the year ended 31 December 2010

	Notes	31-Dec-10 \$	31-Dec-09 \$
COST OF SERVICES			
Operating Revenue			
Payments from members		3,102,154	2,917,382
External Grants	11	392,250	392,250
Interest Received		202,804	139,242
Other	13	49,343	77,224
Total Operating Revenue		<u>3,746,551</u>	<u>3,526,098</u>
Operating Expenses			
Wages & Salaries		329,984	285,358
Superannuation		54,708	48,407
AINSE Awards			
Students	9	597,689	472,126
Research Fellowship	9	883,369	766,987
Research Awards	9	1,287,761	1,083,848
Conference Subsidies		166,450	175,360
ARC LIEF Grants	11	420,000	430,000
Other Expenses	12	205,421	140,431
Total Operating Expenses		<u>3,945,382</u>	<u>3,402,517</u>
Surplus/(Deficit) for the year		(198,831)	123,581
Transfer Equity from AINSE Inc		-	2,397,752
Accumulated funds brought forward		(5,938)	-
Accumulated Surplus (Deficit)		<u>(204,769)</u>	<u>2,521,333</u>
Add (Less): transfer to Reserves			
Long Term Projects Reserve		-	(2,527,271)
Grants Reserve		(732,729)	-
Accumulated results of operations at end of financial year		<u>(937,498)</u>	<u>(5,938)</u>

The accompanying notes form an integral part of these accounts.

Statement of Cash Flows

for the year ended 31 December 2010

	Notes	31-Dec-10 \$ Inflows/(Outflows)	31-Dec-09 \$ Inflows/(Outflows)
CASH FLOWS PROVIDED BY (USED IN) OPERATING ACTIVITIES			
Receipts from operations		49,343	333,923
Receipts from members		3,086,535	2,917,382
Receipts from grants		392,250	1,272,250
Interest received		187,447	139,245
		<u>3,715,575</u>	<u>4,662,800</u>
Grant expenditures		(3,355,269)	-
Payments to suppliers and employees		(499,433)	(2,788,884)
		<u>(3,854,702)</u>	<u>(2,788,884)</u>
Net cash flows provided by (used in) operating activities	16	<u>(139,127)</u>	<u>1,873,916</u>
CASH FLOWS PROVIDED BY (USED IN) INVESTING ACTIVITIES			
Fixed asset purchase from AINSE Ltd		-	(38,762)
Transfer from AINSE Inc.		-	2,397,752
Proceeds from sale of property, plant and equipment		20,000	-
Purchase of property, plant and equipment		(35,244)	-
Net cash flows provided by (used in) investing activities		<u>(15,244)</u>	<u>2,358,990</u>
Net increase (decrease) in cash held		<u>(154,371)</u>	<u>4,232,906</u>
Cash at beginning of reporting period		4,232,906	-
Cash at end of reporting period	2/4	<u>4,078,535</u>	<u>4,232,906</u>

Statement of Changes in Equity

for the year ended 31 December 2010

	Reserve Grants \$	Reserve Long Term Projects \$	Retained Profits \$	Total \$
Balance at 1 January 2009	-	-	-	-
Profit / (Loss) attributable to company	-	-	2,521,333	2,521,333
Transfers to/from reserves	2,027,271	500,000	(2,527,271)	-
Balance at 31 December 2009	<u>2,027,271</u>	<u>500,000</u>	<u>(5,938)</u>	<u>2,521,333</u>
Profit / (Loss) attributable to entity	-	-	(198,831)	(198,831)
Transfers to and from reserves	732,729	-	(732,729)	-
Awards Reserve	-	-	-	-
Balance at 31 December 2010	<u>2,760,000</u>	<u>500,000</u>	<u>(937,498)</u>	<u>2,322,502</u>

Notes to the Financial Statements

for the year ended 31 December 2010

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

The financial report covers AINSE Ltd as an individual entity. It is a company limited by guarantee.

Basis of Preparation

The financial report is a general purpose financial report that has been prepared in accordance with Australian Accounting Standards, Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board and the Corporations Act 2001.

Australian Accounting Standards set out accounting policies that the AASB has concluded would result in a financial report containing relevant and reliable information about transactions, events and conditions to which they apply. Material accounting policies adopted in the preparation of this financial report are presented below. They have been consistently applied unless otherwise stated.

The financial report has been prepared on an accruals basis and is based on historical costs, modified where applicable, by the measurement at fair value of selected non-current assets, financial assets and financial liabilities.

a) Income Tax

AINSE Limited is exempt from income tax under section 50-5 of the Income Tax Assessment Act 1977 as the Company was established for the purpose of enabling scientific research to be conducted in Australia.

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 depreciated on a straight line basis over their useful lives to the Company 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%
Motor Vehicles	25%

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

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

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.

Notes to the Financial Statements

for the year ended 31 December 2010

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 Company assesses whether there is objective evidence that a financial instrument has been impaired.

d) Impairment of Assets

At each reporting date, the Company 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.

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

e) Employee Benefits

Provision is made for the Company'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 Company 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 relating to the provision of services is recognised to the extent that expenditure is recoverable, which may be before or after delivery of the service to the customer.

Grants in relation to the day to day operations of the Company are recognised when the entity obtains control of the grant and it is probable that the economic benefits gained from the grant can be measured reliably.

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

Grants in relation to the acquisition of capital equipment are accounted for through the Balance Sheet account; Revenue in Advance. Any expenditure made during the year reduces this balance, with any surplus or deficit on completion of the grant to be recognised in the Income Statement. This policy has been adopted as the purpose of these grants is to commission the purchase of equipment, with control of the asset upon completion to vest with ANSTO.

All revenue is stated net of the amount of Goods and Service 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. Receivable 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) Change in Accounting Policy and Comparatives

The Company has changed its accounting policy relating to the recognition of grant income and expenditure. Previously grants relating to the acquisition of capital equipment were recognised when the entity obtained control of the grant and it was probable that the economic benefits gained from the grant could be measured reliably. The Company has now elected to only recognise any surplus or deficit on completion of

Notes to the Financial Statements

for the year ended 31 December 2010

the grant within the Income Statement. This change has been implemented as the purpose of these grants is to commission the purchase of equipment, with control of the asset upon completion to vest with ANSTO. As the Company will not retain control of the assets the directors are of the opinion that this will provide a more accurate result within each reporting period. The aggregate effect of the changes for the year ended 31 December 2010 is as follows:

Income and Expenditure Statement 2009	Previous Policy Policy \$	Adjustment \$	Revised Policy
External Grants (Revenue)	1,272,250	(880,000)	392,250
External Grants (Expenses)	(1,310,000)	880,000	(430,000)
Net Grant Surplus/(Deficit)	<u>(37,750)</u>	<u>-</u>	<u>(37,750)</u>
2010			
External Grants (Revenue)	1,243,250	(851,000)	392,250
External Grants (Expenses)	(1,271,000)	851,000	(420,000)
Net Grant Surplus/(Deficit)	<u>(27,750)</u>	<u>-</u>	<u>(27,750)</u>
Balance Sheet			
2009			
Sundry Payables and Accrued Expenses	1,780,008	(910,000)	870,008
Revenue in Advance – Grant Monies	-	910,000	910,000
Trade and Other Payables (Note 7)	<u>1,780,008</u>	<u>-</u>	<u>1,780,008</u>

Where required, comparative figures have been adjusted retrospectively to conform to the change in accounting policy.

	31-Dec-10 \$	31-Dec-09 \$
2. CASH		
Operating Account	102,918	83,191
Petty Cash	500	500
	<u>103,418</u>	<u>83,691</u>

3. TRADE AND OTHER RECEIVABLES

Current		
Trade Debtors	43,664	29,912
Other Receivables	106,601	101,031
	<u>150,265</u>	<u>130,943</u>

There are no balances within trade and other receivables which contain assets that are not impaired and past due. It is expected these balances will be received when due. Impaired assets are provided for in full where applicable.

4. INVESTMENTS

Cash Deposit Account	3,975,117	4,149,215
	<u>3,975,117</u>	<u>4,149,215</u>

Notes to the Financial Statements

for the year ended 31 December 2010

	31-Dec-10	31-Dec-09	
	\$	\$	
5. OTHER CURRENT ASSETS			
Current			
Prepayments	2,474	-	
Interest Accrued	53,013	37,656	
	<u>55,487</u>	<u>37,656</u>	
6. PLANT AND EQUIPMENT			
Plant & Equipment			
At Cost	9,738	9,738	
Accumulated Depreciation	(1,705)	(731)	
Total Plant and Equipment	<u>8,033</u>	<u>9,007</u>	
Motor Vehicles			
At Cost	35,244	29,024	
Accumulated Depreciation	(6,461)	(4,354)	
Total Motor Vehicle	<u>28,783</u>	<u>24,670</u>	
Movements in Carrying Amounts	Plant & Equipment	Motor Vehicles	Total
	\$	\$	\$
Balance at 1 January 2009	-	-	-
Additions	9,738	29,024	38,762
Disposals	-	-	-
Depreciation Expense	(731)	(4,354)	(5,085)
Balance at 31 December 2009	<u>9,007</u>	<u>24,670</u>	<u>33,677</u>
Additions	-	35,244	35,244
Disposals	-	(23,703)	(23,703)
Depreciation Expense	(974)	(7,428)	(8,402)
Balance at 31 December 2010	<u>8,033</u>	<u>28,783</u>	<u>36,816</u>
7. TRADE AND OTHER PAYABLES			
Unsecured Liabilities	31-Dec-10	31-Dec-09	
	\$	\$	
Trade Payables	133,245	3,689	
Sundry Payables and Accrued Expenses	724,324	870,008	
Short-Term Employee Benefits	126,987	124,532	
Revenue in Advance - Grant Monies (Refer to Note 11b)	1,010,634	910,000	
	<u>1,995,190</u>	<u>1,908,229</u>	
8. PROVISION FOR EMPLOYEE ENTITLEMENTS			
Long-Term Employee Benefits	3,411	5,620	
	<u>3,411</u>	<u>5,620</u>	
9. AINSE PROGRAMS			
Postgraduate Awards			
Lucas Heights Costs	267,639	172,506	
Travel and Accommodation	33,163	34,970	
Stipends	287,912	251,343	
-	<u>588,714</u>	<u>458,819</u>	
-			
Winter School	8,975	13,307	
	<u>8,975</u>	<u>13,307</u>	

Notes to the Financial Statements

for the year ended 31 December 2010

Research Fellowships	883,369	766,987
	<u>883,369</u>	<u>766,987</u>
Research Awards		
Lucas Heights Costs	1,110,946	964,903
Minor Equipment and Materials	33,200	19,754
Travel and Accommodation	136,085	98,187
Other Costs	7,530	1,004
	<u>1,287,761</u>	<u>1,083,848</u>

10. SEGMENT REPORTING

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

11. AUSTRALIAN RESEARCH COUNCIL GRANTS

a) Operating Grants

	ISIS LE0882725	Be Filter LE0989127	ITRAX LE100100141	Total
	\$	\$	\$	\$
2009				
Grant Revenue	200,000	-	-	200,000
Member Contributions	<u>192,250</u>	-	-	<u>192,250</u>
Total Income	392,250	-	-	392,250
External Payments	(400,000)	-	-	(400,000)
AINSE Contribution	-	<u>(30,000)</u>	-	<u>(30,000)</u>
Total Expenses	(400,000)	(30,000)	-	(430,000)
Net Surplus/(Deficit)	<u>(7,750)</u>	<u>(30,000)</u>	-	<u>(37,750)</u>
2010				
Grant Revenue	200,000	-	-	200,000
Member Contributions	<u>192,250</u>	-	-	<u>192,250</u>
Total Income	392,250	-	-	392,250
External Payments	(400,000)	-	-	(400,000)
AINSE Contribution	-	-	<u>(20,000)</u>	<u>(20,000)</u>
Total Expenses	(400,000)	-	(20,000)	(420,000)
Net Surplus/(Deficit)	<u>(7,750)</u>	-	<u>(20,000)</u>	<u>(27,750)</u>

b) Capital Grants

	Be Filter LE0989127	ITRAX LE100100141	Total
	\$	\$	\$
Balance at 1 January 2009	-	-	-
External Grants	400,000	-	400,000
Member Contributions	480,000	-	480,000
AINSE Contribution	30,000	-	30,000
External Payments	-	-	-
Balance at 31 December 2009	<u>910,000</u>	-	<u>910,000</u>
External Grants	-	420,000	420,000
Member Contributions	-	431,000	431,000
AINSE Contribution	-	20,000	20,000
External Payments	(419,630)	(350,736)	(770,366)
Balance at 31 December 2010	<u>490,370</u>	<u>520,264</u>	<u>1,010,634</u>

This note should be read in conjunction with Note 1 Statement of Significant Accounting Policies (h) and (j).

Notes to the Financial Statements

for the year ended 31 December 2010

	31-Dec-10	31-Dec-09
	\$	\$
12. OTHER EXPENDITURE		
Conference Management	<u>15,860</u>	<u>7,159</u>
Publications and Promotions	<u>9,297</u>	<u>8,801</u>
Meetings and Committees	<u>61,763</u>	<u>48,049</u>
Conference Management	<u>15,860</u>	<u>7,159</u>
Publications and Promotions	<u>9,297</u>	<u>8,801</u>
Meetings and Committees	<u>61,763</u>	<u>48,049</u>
AINSE Secretariat		
Audit Fees	14,800	14,145
Bank Charges	1,963	2,416
Depreciation	8,402	7,013
Office Supplies	3,281	1,390
Postage and Telephone	1,717	1,685
Insurance	8,464	12,540
Entertaining	643	747
Books and Software	5,167	-
Office Equipment and Repairs	-	1,951
Administration and Staff Training	1,738	2,052
Travel and Accommodation	21,255	17,098
Vehicle Expenses	8,673	9,586
Staff Recruitment	25,619	-
Loss on disposal of assets	3,703	-
FBT Expense & Payments	8,605	3,212
Legal expenses	-	776
Miscellaneous	4,471	1,811
Total AINSE Secretariat	<u>118,501</u>	<u>76,422</u>
Total Other Expenditure	<u>205,421</u>	<u>140,431</u>
13. OTHER INCOME		
Sponsorships:		
NCTA Conference Conference	-	15,858
AANSS	2,400	1,500
Neutron School	12,714	-
Fusion Materials Workshop	182	-
Conference Registrations	25,027	54,274
Other	9,020	5,592
	<u>49,343</u>	<u>77,224</u>

Notes to the Financial Statements

for the year ended 31 December 2010

	31-Dec-10 \$	31-Dec-09 \$
14. MOVEMENT IN RESERVES		
Awards Reserve		
Opening Balance at 1 January	2,027,271	-
Transfer from P&L	732,729	2,027,271
Balance as at 31 December	<u>2,760,000</u>	<u>2,027,271</u>

The awards reserve was established to provide for the value of unexpended grants at the end of each year.

Long Term Projects Reserve		
Opening Balance at 1 January	500,000	-
Transfer from P&L	-	500,000
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 AINSE's surplus of each year is preserved for investment in new research infrastructure if need be.

15. AUDITORS REMUNERATION

Remuneration of the auditor of the entity for:		
Auditing or reviewing the financial report	10,630	11,145
Acquittal of Grants	-	-
Other Services	4,170	3,000
	<u>14,800</u>	<u>14,145</u>

16. RECONCILIATION OF CASH PROVIDED BY OPERATING ACTIVITIES TO PROFIT FROM ORDINARY ACTIVITIES

Profit/(Loss) from Ordinary Activities	<u>(198,831)</u>	<u>123,581</u>
Changes in Assets & Liabilities		
(Increase)/Decrease in other debtors and prepayment	(37,153)	(130,943)
(Increase)/Decrease in other assets	-	(37,656)
Increase/(Decrease) in creditors and accruals	85,480	3,689
Increase/(Decrease) in employee provisions	(728)	114,181
Increase/(Decrease) in other provisions	-	1,780,008
	<u>47,599</u>	<u>1,729,279</u>
Non-Cash Items		
Depreciation	8,402	5,084
Movement in entitlements	-	15,971
Loss on sale of asset	3,703	-
-	<u>12,105</u>	<u>21,055</u>
-		
Net cash provided by (used in) operating activities	<u>(139,127)</u>	<u>1,873,915</u>

Cash at the end of the financial year, as shown in the cash flow statement, is reconciled to the items in the balance sheet as follows:

Cash	103,418	83,691
Investments	3,975,117	4,149,215
	<u>4,078,535</u>	<u>4,232,906</u>

Notes to the Financial Statements

for the year ended 31 December 2010

17. FINANCIAL INSTRUMENTS

Financial Risk Management

AINSE'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 AINSE's operations.

AINSE does not have any derivative instruments at 31 December 2010.

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

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

a) Liquidity Risk

AINSE 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.

AINSE 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

AINSE'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:

	Weighted Average Effective Interest Rate		Floating Interest Rate		Non-interest bearing		Total	
	2010 %	2009 %	2010 \$	2009 \$	2010 \$	2009 \$	2010 \$	2009 \$
Financial Assets								
Cash and cash equivalents	3.99%	3.11%	4,078,035	4,232,406	-	-	4,078,035	4,232,406
Receivables	-	-	-	-	150,265	130,943	150,265	130,943
Total Financial Assets		-	<u>4,078,035</u>	<u>4,232,406</u>	<u>150,265</u>	<u>130,943</u>	<u>4,228,300</u>	<u>4,363,349</u>
Financial Liabilities								
Trade and other payables	-	-	1,995,190	1,908,229	-	-	1,995,190	1,908,229
Total Financial Liabilities			<u>1,995,190</u>	<u>1,908,229</u>	<u>-</u>	<u>-</u>	<u>1,995,190</u>	<u>1,908,229</u>

Notes to the Financial Statements

for the year ended 31 December 2010

Net Fair Values

	2010		2009	
	Carrying amount	Net Fair Value	Carrying amount	Net Fair Value
Financial assets	\$	\$	\$	\$
Cash	4,078,535	4,078,535	4,232,906	4,232,906
Receivables	150,265	150,265	130,943	130,943
-	<u>4,228,800</u>	<u>4,228,800</u>	<u>4,363,849</u>	<u>4,363,849</u>
-				
Financial liabilities				
Trade and other payables	1,995,190	1,995,190	1,908,229	1,908,229
-	<u>1,995,190</u>	<u>1,995,190</u>	<u>1,908,229</u>	<u>1,908,229</u>
-				

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 asset

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:

Fair values are materially in line with carrying values.

18. COMPANY DETAILS

Principal place of business

AINSE Limited

New Illawarra Road

Lucas Heights, NSW AUSTRALIA

19. KEY MANAGEMENT PERSONNEL COMPENSATION

	Short-term Benefit	Post Employment Benefit	Total
	\$	\$	\$
2010			
Total compensation	<u>173,101</u>	<u>7,139</u>	<u>180,240</u>
2009			
Total compensation	<u>137,144</u>	<u>(3,544)</u>	<u>133,600</u>

20. MEMBERS' GUARANTEE

The entity is incorporated under the Corporations Act 2001 and is an entity limited by guarantee. If the entity is wound up the constitution states that each member is required to contribute a maximum of \$50 each towards meeting any outstanding obligations of the entity. At 31 December 2010 the number of members was 44 (2009: 39).

Directors' Declaration

For the Financial Year Ended 31 December 2010

The Directors of the Company declare that:

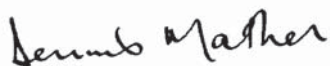
1. The financial statements and notes, as set out on pages 11 to 22, are in accordance with the Corporations Act 2001:
 - (a) Comply with Accounting Standards and the Corporations Regulations 2001; and
 - (b) Give a true and fair view of the financial position as at 31 December 2010 and of the performance for the year ended on that date of the Company.
2. As at the date of this statement there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the Board of Directors.

Director



Director



Dated this ninth day of March, 2011

Independent Audit Report to the Members

For the Financial Year Ended 31 December 2010

Report on the Financial Report

We have audited the accompanying financial report of AINSE Limited (the Company), which comprises the balance sheet as at 31 December 2010 and the income and expenditure statement, statement of changes in equity and cash flow statement for the year ended on that date, a summary of significant accounting policies and other explanatory notes and the directors' declaration as set out in pages 14 to 23.

Directors' Responsibility for the Financial Report

The directors of the Company 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 Corporations Act 2001. This responsibility includes establishing and maintaining internal control 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 Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, 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 the Corporations Act 2001. We confirm that the independence declaration required by the Corporation Act 2001, provided to the directors of AINSE Limited on 24 February 2011 would be in the same terms if provided to the directors as at the date of this auditors report.

Audit Opinion

In our opinion, the financial report of AINSE Limited is in accordance with the Corporations Act 2001, including:

- (a) Giving a true and fair view of the Company's financial position as at 31 December 2010 and of their performance for the year ended on that date; and
- (b) Complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Corporations Regulations 2001.

Escott Aston
Chartered Accountants
291 Belmore Road
Riverwood NSW 2210

Dated this ninth day of March, 2011



David G Aston
Partner

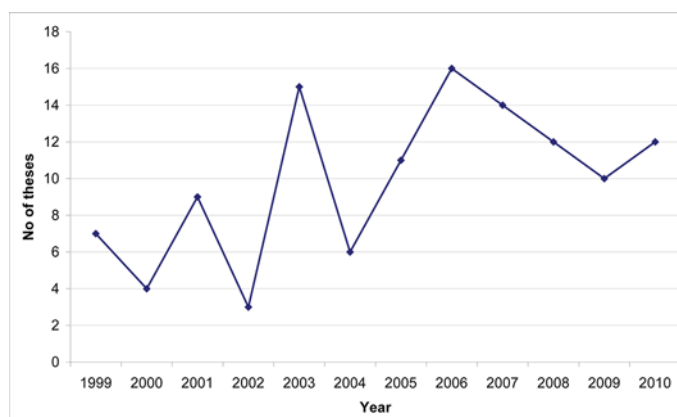
AINSE Postgraduate Research Awards

An AINSE Postgraduate Research Award (PGRA) is a top-up scholarship. To be eligible for one of these awards, an applicant must hold an Australian Postgraduate Award (APA) or equivalent scholarship. The PGRA may be held until the expiry of the primary scholarship.

In addition to providing a student with a stipend of \$7,500 pa, the award provides for access to ANSTO's world-class facilities and expertise by making a nominal payment of \$5,500 pa to ANSTO in recognition of the use of facilities and the contribution of the ANSTO co-supervisor. An allowance for travel expenses for two visits and a total of one month's accommodation to Lucas Heights per annum is also awarded.

Twenty one new AINSE postgraduate research projects were supported by a PGRA in 2010, and twelve were finalised with the receipt of a thesis, bringing the total number of current scholars to 81. Through its PGRA program, AINSE has now helped train 299 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 scholarships.

John Dawson of James Cook University, the second John Ferris Memorial postgraduate scholar, was appointed in 2010.



Graph showing the number of PGRA scholars completing each year.

Postgraduate scholars whose theses were received during 2010

A fine-resolution reconstruction of climatic fluctuations over the last 2000 years in south-eastern Australia
Cameron Barr, Geography and Environmental Studies, University of Adelaide. Commenced 01/07/04

Design and synthesis of advanced broadband optical coatings
Nemo Bilus Abaffy, Applied Physics, RMIT University. Commenced 1/07/08

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

Electrochemically "switchable" silicon based organic surfaces: dynamic substrates to study the adhesion of mammalian cells
Simone Ciampi, Chemistry, The University of New South Wales. Commenced 1/7/07

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

Macromolecular orientation induced by injection moulding processes

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

Structure-property relationships in thermoset nanocomposites

Betime Nuhiji, Engineering and Technology, Deakin University. Commenced 01/07/06

A nanostructural investigation of hydrogen storage in aluminium

Mark Paskevicius, Applied Physics, Curtin University of Technology. Commenced 01/07/06

Selective sequestering of heavy metal and actinide ions by biopolymer powders derived from silk fibres

Rangam Rajkhowa, Centre for Material and Fibre Innovation, Deakin University. Commenced 01/07/08

Nanoscale multilayer materials

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

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

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

Postgraduate scholars, and their projects, who were supported during 2010

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

New constraints on the environmental thresholds of the GBR: evidence from the drowned fossil reefs

Elizabeth Abbey, Earth and Environmental Sciences, James Cook University. Commenced 1/07/08

Coupled structural and property studies of the phase transformation behaviour of environmentally friendly Pb-free piezoceramics

Patryck Allen, Chemistry, The University of Sydney. Commenced 01/07/09

Corals as biomonitors of Darwin Harbour health

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

Investigations on the fabrication plasma polymerized organic thin films

Kateryna Bazaka, Engineering, James Cook University. Commenced 1/07/08

¹⁴C analyses of organic and inorganic fractions in cave calcareous tufa: implication for $\delta^{13}\text{C}$ significance in speleothems

Romina Belli, Environmental Science, University of Newcastle. Commenced 1/07/08

Shape-memory alloy actuators for nanoscale opto-mechanical applications

Vijay Bhatia, Institute for Nanoscale Technology, University of Technology Sydney. Commenced 1/07/10

Development of defect perovskites for use as cathode materials in lithium ion batteries

William Brant, School of Chemistry, The University of Sydney. Commenced 1/07/10

Fate of metal pollutants released from the Rum Jungle uranium/copper mine into the Finniss River, NT Australia

*Jenny Brazier, Education, Health and Science, Charles Darwin University. Commenced 01/07/02

Electronic and magnetic properties of rare earth nitride thin films

Josh Brown, Physics, Macquarie University. Commenced 01/07/09

Palaeofire records and sedimentation in the context of past and current climate change in eastern Australia

Katherine Brownlie, School of Earth and Environmental Science, University of Wollongong. Commenced 1/07/10

Negative thermal expansion in metal-organic frameworks and cyanide bridged co-ordination frameworks

Lisa Cameron, School of Chemistry, The University of Sydney. Commenced 1/07/10

Hydrogen storage and negative thermal expansion properties of novel cyanide-bridged coordination frameworks

Jessica Chadbourne, Chemistry, The University of Sydney. Commenced 01/07/09

Structure-function relations in polymer-protein conjugates for enhanced drug design

Xiaojing Chen, Australian Institute for Bioengineering & Nanotechnology, The University of Queensland. Commenced 1/07/10

Determination of magnetic ordering in transition metal, lanthanoid and 3d/4f heterometallic discrete complexes

*Anthony Chesman, Chemistry, Monash University. Commenced 01/07/09

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

*Tara Congo (née Busbridge), Nanoscale Science and Technology Centre, Griffith University. Commenced 1/7/07

Factors affecting quantification in positron emission tomography for radiopharmaceuticals with mixed neuronal and non-neuronal signals
Christopher Constable, Health Sciences - Medical Radiation Science, The University of Sydney. Commenced 01/07/09

Low dimensional spintronic materials studied with neutron reflectometry
David Cortie, School of Physics, The University of Western Australia. Commenced 1/07/10

Testing the Australian megatsunami hypothesis
Claire Courtney, Biological, Earth and Environmental Sciences, The University of New South Wales. Commenced 01/07/09

Carbonate sediment age, distribution and reef island accretion indicated by age and taphonomic studies of benthic foraminifera
John Dawson, Earth and Environmental Sciences, James Cook University. Commenced 01/07/09

Catchment to regional-scale water and salinity impacts of changing land use in south-west Victoria
Joshua Dean, Environmental Geoscience, La Trobe University. Commenced 1/07/10

Guest effects on spin crossover in nanoporous molecular frameworks
Elizabeth Fellows, Chemistry, The University of Sydney. Commenced 1/07/08

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

Correlating the nanostructure of stimuli responsive liquid crystal systems with drug release behaviour in vitro and in vivo
Wye Khay Fong, Pharmacy, Monash University. Commenced 01/07/09

PIXE elemental mapping of malarial diseased cerebral tissue
*Mark Hackett, Chemistry, The University of Sydney. Commenced 01/07/08

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

Supramolecular solids as hydrogen storage materials
Gregory Hall, School of Chemistry, Monash University. Commenced 1/07/10

Nanostructure design and toughening mechanisms in thermosets using reactive block copolymers
*Nishar Hameed, Centre for Material and Fibre Innovation, Deakin University. Commenced 01/07/09

Increase in photocatalytic activity of TiO₂ through substitutional and interstitial cation doping
Dorian Hanaor, Materials Science and Engineering, The University of New South Wales. Commenced 1/07/08

Morphodynamics of coral reef environments and associated sedimentary bodies
Daniel Harris, School of Geosciences, The University of Sydney. Commenced 1/07/10

From stellarators to tokamaks: The effects of 3D structure on Alfvén eigenmodes
Shaun Haskey, Research School of Physical Sciences and Engineering, The Australian National University. Commenced 1/07/10

Structure-dynamics-function relationships of replisomal macromolecular assemblies
Flynn Hill, School of Chemistry, University of Wollongong. Commenced 1/07/10

Radiocarbon activities in soil particle-size fractions at different depths: insight on C dynamics in two NSW forest soils
Eleanor Hobley, School of Engineering, The University of Newcastle. Commenced 1/07/10

Radiocarbon contamination in lacustrine sediments: understanding the process and developing a reliable dating strategy
Jamie Howarth, Geography, University of Otago. Commenced 1/07/08

Plasma deposition techniques for proton exchange membrane fuel cells
Jessica Hudspeth, Chemistry, Australian National University. Commenced 01/07/09

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

Probing the effects of oxidative stress on cellular membrane interactions
Jacqueline Knobloch, School of Chemistry, The University of Adelaide. Commenced 1/07/10

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

STIM & PIXE mapping of diseased cerebral and other tissues
 Joonsup Lee, School of Chemistry, The University of Sydney. Commenced 1/07/10

Thickness-dependant resistivity of ultra-thin polymeric films and their application as novel selective gas sensors
 Junqiao Lee, Chemistry Curtin University of Technology. Commenced 1/07/10

Surfactant templated biomineralisation
 Connie Liu, Chemistry, The University of Sydney. Commenced 01/07/09

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

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

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

Assessing the neuroinflammatory consequences of adolescent drug and alcohol exposure
 Craig Motbey, Psychology, The University of Sydney. Commenced 01/07/09

Guest-dependence of spin crossover and negative thermal expansion in coordination frameworks
 *Ben Mullaney, School of Chemistry, The University of Sydney. Commenced 1/07/10

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

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

Application of ⁶⁷Ga-labelling to the studies of metabolism of gallium compounds
 *Annie Nguyen, Chemistry, The University of Sydney. Commenced 01/07/08

Mathematical modelling of drying of colloidal nanoparticle sols
 *Glen Oberman, Mathematical Sciences, Queensland University of Technology. 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 and Southern Ocean Studies, University of Tasmania. Commenced 01/07/04

¹⁰Be in Antarctic ice cores: quantifying climate effects for improved reconstructions of solar activity
 *Joel Pedro, Institute of Antarctic and Southern Ocean Studies, University of Tasmania. Commenced 1/7/07

Low temperature synthesis of well-ordered titania nanoparticles for applications in green catalysis
 Jan-Yves Ruzicka, Chemistry, University of Canterbury. Commenced 01/07/09

Simulation of cyclic fatigue in lead-free piezoelectric ceramics
 Hugh Simons, Materials Science and Engineering, The University of New South Wales. Commenced 01/07/09

Morphological and photophysical investigation of organic semiconducting films for opto-electronic applications
 Arthur Smith, Molecular and Microbial Sciences, The University of Queensland. Commenced 01/07/08

A crystal structural investigation of lead containing jarosite solid solutions
 Henry Spratt, School of Chemistry, Queensland University of Technology. Commenced 1/07/10

Design of polymer thin films as biocompatible coatings for biomedical applications
 Andrew Telford, School of Chemistry, The University of Sydney. Commenced 1/07/10

Surface waters, groundwaters, geology, and water-rock interactions in the Lawn Hill region of far NW Queensland
 Mira van der Ley, School of Biological Earth and Environmental Sciences, The University of New South Wales. Commenced 1/07/10

Antiobesity pharmacotherapy: radiolabelling study of modified growth hormone peptides for the treatment of obesity
 *Bianca van Lierop, Chemistry, Monash University. Commenced 01/07/08

The role of water uptake in novel all solid-state polymeric ion sensors
 *Jean-Pierre Veder, Nanochemistry Research Institute, Curtin University of Technology. Commenced 01/07/08

Surfactant adsorption and structure at ionic liquid interfaces
 Deborah Wakeham, School of Chemistry, The University of Newcastle. Commenced 1/07/10

UV-B screening compounds in the moss ceratodon purpureus: using radiocarbon dating and novel compounds to describe past Antarctic climates
Melinda Waterman, School of Biological Sciences, University of Wollongong. Commenced 1/07/10

Understanding nanostructure in lead-containing piezoceramics
Ross Whitfield, Chemistry, Australian National University. Commenced 01/07/09

Tertiary starch structure and improving human nutrition
Torsten Witt, Centre for Nutrition and Food Science, The University of Queensland. Commenced 1/07/09

Negative thermal expansion in metal-organic frameworks
Yue Wu, Chemistry, The University of Sydney. Commenced 01/07/08

Characterising antimicrobial protein-membrane complexes by neutron reflectometry
Gloria Xun, Biological Sciences, University of Auckland. Commenced 01/07/09

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

AINSE Research Fellows

AINSE, in conjunction with the Australian Nuclear Science and Technology Organisation (ANSTO), has established a Fellowship Scheme to add impetus to member Universities' growing stature in nuclear science and engineering and in related fields. The first two Fellowships were awarded in 2006 for a 3-year appointment in the first instance with the possibility of an extension to five years where subsequent continuing appointment at the university is foreseen. It is AINSE's intention to continue to appoint two more research fellows each year.

AINSE highlighted four research directions in calling for applications for Research Fellowships this year:

1. neutron scattering
2. radiopharmaceuticals
3. high resolution climate records using nuclear techniques, and
4. materials engineering.

Applications were also considered, as in past years, where the research aligns with the broad spectrum of research foci supported by AINSE. While the four highlighted directions were promoted in calling for Research Fellowship applications, applicants could also propose research programs which fall outside these topics as long as they required the use of ANSTO facilities and were aligned with the joint research interests of ANSTO and the AINSE member university.

Year commenced/Research Fellow/University
Project title

2006 Darren Goossens The Australian National University
Study of the nature and role of nanoscale order in complex materials

2006 Daniel Riley The University of Melbourne
Use of ultra-fast in-situ diffraction in the development of advanced materials

2007 Duncan McGillivray The University of Auckland
Probing the mechanisms of biomembrane interactions

2007 Moeava Tehei University of Wollongong
Study of relationships between function, structure and dynamics of biological molecules by neutron scattering

2008 Lizhong He The University of Queensland
The physical states of pharmaceutical proteins and self-assembled proteins

2008 Helen McGregor University of Wollongong
El Niño in context: reading the coral record of past climate extremes

2009 David Turner Monash University
Structural studies of metal organic materials for gas storage and anion exchange

2009 John Daniels The University of New South Wales
Application of advanced diffraction techniques for component and material design in functional, biological and structural applications

2010 Rachel Popelka-Filcoff Flinders University
Geochemical characterisation of Australian ochre by k_α -neutron activation analysis for characterisation and sourcing of aboriginal Australian mines and artefacts

2010 Roman Dronov Flinders University
Design of advanced optical biosensors through neutron based surface analysis

Summary of AINSE Research Awards

The primary purpose of the AINSE Research Award program 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; they provide facility access fees as well as travel and accommodation expenses during periods of attachment. AINSE Research 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. For neutron scattering projects conducted at ANSTO's Bragg Institute facility charges do not generally apply, however, projects of novice users allow for a facility charge.

The disciplines involved during 2010 included the following:

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

chemistry applied, biochemistry, chemical technology, polymer science

engineering chemical, electrical, mechanical, materials science, microelectronics

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

environmental and earth sciences Antarctic and Southern Ocean studies, environmental biology, environmental geology, geochemistry, geomorphology, geography, coastal management, marine science

medicine medical and health physics, nuclear, positron emission tomography

plus Aboriginal and Torres Strait Studies, anthropology, archaeology, botany, cultural studies, geophysics, microscopy and microanalysis, natural history, resource science and management, safety science, zoology.

Research Awards for 2010 are shown on the following pages in order by university, faculty and surname to highlight the diversity of institutions and disciplines within which projects occur. This program includes arrangements for general research students to access Lucas Heights facilities but does not include access arrangements for AINSE postgraduate scholars, see pages 25-29. 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 ANSTO.

For information on particular facilities utilised, see the the Users Guide on our home page, <http://www.ainse.edu.au>

During 2010, 198 projects were supported. They had a total value of \$1,655,066 involving thirty-seven of the forty-three members. The table on the following page shows the distribution of research awards by university and by specialist areas.

UNI	Specialist Areas						Total
	A	B	E	G	M	N	
ACU					1		1
ADE	3			4			7
AKL			1	10	1		12
ANU	1		2	4			7
BAL			4				4
CAN	1					1	2
CBR			1				1
CQU					1		1
CSI				6			6
CSU		1	1				2
CUR					3	1	4
DEA			2	1	1		4
ECU					2		2
FLI	2				1		3
GRI			1		1		2
JAM	1		1			1	3
LAT	2	1	3		1		7
MAC		1	2				3
MEL	1		2	3	2		8
MON	1		3	7	1	1	13
MUR					1		1
NCT	1		1	4			6
NSW	2		3	11	2	1	19
OTA	1						1
QLD	5		5	5			15
QUT	1				1	1	3
RMI			1	2	4		7
SCU			3				3
SWI				1	1	1	3
SYD	2	3	2	5	2	2	16
TAS			3				3
UNE			1				1
USA				1		1	2
UTS			1		1		2
UWA	1	1	3	2	1		8
UWS		1	1				2
WOL	6	1		7	1		15
Total	31	9	47	73	29	10	199

Legend

- A Archaeology and Geosciences
- B Biomedical Science and Biotechnology
- E Environmental Science
- G Bragg Institute - Neutron Scattering
- M Materials - Properties and Engineering
- N Materials - Structures and Dynamics

The legend for the university abbreviations can be found on page 77.

Australian Catholic University

Faculty of Arts & Sciences

10/130	Dr Pre De Silva Application of geopolymer binders in nuclear waste immobilisation	\$11,705
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Australian Catholic University Total		\$11,705
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University of Adelaide

Faculty of Humanities & Social Sciences

10/070	E/Professor Martin Williams Establishing an accurate chronology for Late Holocene technological change and coastal resource use, Kurnell Peninsula, Sydney	\$6,720
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Faculty of Engineering Computer & Mathematical Sciences

10/1212	Professor Valerie Linton Measurement of residual stresses around a shielded metal arc T-butt weld in thick section steel	\$1,005.00
10/1278	Professor Valerie Linton The influence of weld toe dressing on the residual stress distribution around T-butt welds in thick section steel	\$1,335.00
10/0687	Professor Valerie Linton Residual stress measurement in a butt weld from a full scale curved thick steel plate	\$1,720.00

Faculty of Sciences

10/065	Professor Alan Cooper Late Pleistocene environmental change coincident with megafaunal extinctions	\$2,355
10/029	Dr Rachel Nanson Linking fluctuations in Holocene climate and sediment supply to episodic progradation of the Mitchell River delta, Queensland	\$5,940
10/01173	A/Professor Allan Pring Probing porosity in ore minerals using SANS	\$2,355

University of Adelaide Total		\$32,255
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The University of Auckland

Faculty of Science

10/048	A/Professor Kathleen Campbell Salt marsh foraminiferal record of Late Holocene sea level rise around the South Island of New Zealand	\$5,940
10/0890	Dr Andrew Dingley The structure of amoebapore-A - membrane complexes by neutron reflectometry	\$1,885
10/0839	Dr Duncan McGillivray Probing interactions between protein/antioxidant complexes and phospholipid membranes	\$1,840
10/1325	Dr Duncan McGillivray Deuterated chemicals for model membrane studies	\$1,180
10/1329	Dr Duncan McGillivray Deuterated polyphenolic antioxidant for protein-membrane-antioxidant studies	\$1,180
10/1130	Dr Duncan McGillivray Probing oxidative stress of cellular membranes	\$2,605

10/1269	Dr Duncan McGillivray Solution structure of anti-microbial protein Amoebapore	\$1,620
10/1276	Dr Duncan McGillivray Bicelles as model membranes - interactions with hydramacin-1 anti-microbial protein	\$3,460
10/1350	Dr Tilo Söhnel Low temperature modification of RuSn ₆ [FeO ₄]O ₄	\$3,100
10/0706	Dr Jadranka Travas-Sejdic Hairpin DNA-based biosensors - temperature profiles	\$1,505
10/0912	Dr Jadranka Travas-Sejdic Conformational changes in conducting polymers	\$2,790
10/131	Dr Geoff Waterhouse High resolution TEM characterisation of novel 3-dimensionally ordered macroporous (3DOM) carbon electrode materials	\$16,360
University of Auckland Total		\$43,465

Australian National University

Centre for Advanced Microscopy

10/1214	Professor Tim White The crystal structures of electrolyte apatites	\$910
10/0958	Professor Tim White Investigation of the macromoleculat mechanism	\$1,045

College of Asia & the Pacific

10/108	Dr Simon Haberle A new late Quaternary palaeohydrology record from the Atherton Tablelands, north Queensland, Australia	\$9,110
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College of Medicine, Biology & Environment

10/096P	Dr Richard Greene Characterisation of the properties of aeolian dust source areas in Australia	\$13,300
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College of Physical and Mathematical Sciences

10/0757	Ms Irene Durant Oxidation state investigation of a ruthenium complex	\$1,210
10/026	Dr Marnie Forster Calibration of OPAL for use in ⁴⁰ Ar/ ³⁹ Ar age determination of K-rich minerals for geological research	\$9,900
10/1178	Dr Yun Liu External field excited structural evolution of potassium sodium niobate single crystals	\$4,380

Australian National University Total		\$39,855
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University of Ballarat

School of Science and Engineering

10/093	A/Professor Kim Dowling Child's play, two years later: linking toenail arsenic concentration to trace elements in the soil environment	\$4,280
10/043	Professor Peter Gell Paleolimnological condition assessment of the Curdies Estuary, Western Victoria	\$14,990

10/092P	Dr Keely Mills Climate change and human disturbance: a multi-lake approach to understanding palaeolimnological responses in western Uganda	\$11,850
10/086	Dr Keely Mills Human impacts on urban wetlands: understanding the past and monitoring their future	\$12,265
University of Ballarat Total		\$43,385

University of Canterbury

College of Science

10/031	Professor Timothy Davies Post-glacial landslide record and hazard implications for Milford Sound, New Zealand	\$9,768
10/060P	Dr Vladimir Golovko From better control morphology control of metal oxide nanoparticles to development of novel photocatalysts	\$5,535
University of Canterbury Total		\$15,303

University of Canberra

Faculty of Applied Science

10/113	Professor Bill Maher Chronological framework for geochemical analysis in an oligomictic lake subject to catastrophic turnover events in Papua New Guinea	\$9,655
University of Canberra Total		\$9,655

Central Queensland University

Faculty of Sciences, Engineering and Health

10/052	Dr Geoffrey Pang Transmission electron microscopy (TEM) studies of the crystallisation of Ru ₂ Si ₃ composite thin films on silicon	\$10,340
Central Queensland University Total		\$10,340

CSIRO

10/1250	Dr James Boland Residual stress measurements in diamond composite coatings	\$2,035
10/1273	Dr Patrick Hartley Transformation kinetics of gas hydrates at deep sea pipeline conditions	\$3,135
10/0882	Dr Hsin-Hui Shen The interaction of the cell-mimicking phospholipid bilayer with annexin 5 at the solid-liquid interface	\$1,375
10/1071	Dr Yansen Lauw Impact of water on the structure of ionic liquids at an electrified interface	\$1,045
10/0335	Dr Nicola Scarlett <i>In situ</i> nucleation and crystallisation studies of jarosite minerals	\$2,475

10/0959	Dr Nathan Webster <i>In situ</i> mineralogical investigation of iron oxide/oxyhydroxide-seeded aluminosilicate precipitation	\$2,805
CSIRO Total		\$12,870

Charles Sturt University

Faculty of Science

10/144	Professor Jane Quinn Comparative analysis of PAXgene sequences in modern and ancient coral samples	\$11,860
10/081	Dr Padraig Strappe Development of a novel PET reporter gene for non-invasive imaging in gene and stem cell therapy applications	\$9,830
Charles Sturt University Total		\$21,690

Curtin University of Technology

Faculty of Science and Engineering

10/146	Dr Deeptangshu Chaudhary Unravelling ternary interactions between polymer, plasticizers and functional nanoparticles within bionanocomposites	\$6,320
10/132P	Professor Roland De Marco A SIMS study of solid-contact (SC) ion-selective electrodes (ISEs) used in calibration free ion sensors based on polymeric thin films	\$14,950
10/059	Professor Roland De Marco An x-ray reflectometry study of molecular templated polymers utilised in the chemical sensing of organic analytes in environmental samples	\$4,520
10/127	Professor It-Meng Low Synthesis of novel TiO ₂ anodes for photo-electrochemical applications	\$15,090
Curtin University Total		\$40,880

Deakin University

School of Life and Environmental Sciences

10/098	Dr Mark Warne Coastal landscapes during the Holocene climatic optimum: a case study of the Warrnambool-Port Fairy district, Australia	\$8,800
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Centre for Material and Fibre Innovation

10/142P	Dr Jian Fang Cleaning uranium from mining water by functional nanofibres	\$7,150
10/149	Professor Qipeng Guo Block copolymer-based nanomaterials: self-assembled blends and complexes via specific interactions	\$7,370
10/1102	Mr Nishar Hameed Toughening mechanisms in thermosets using reactive block copolymers	\$2,310
Deakin University Total		\$25,630

Edith Cowan University

School of Engineering

10/135	A/Professor Steven Hinckley Gamma irradiation effects in fibre-Bragg grating optical sensors	\$3,865
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School of Natural Sciences

10/129	Dr Magdalena Wajrak Investigation of arsenic film electrodeposited on solid gold electrode	\$13,675
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Edith Cowan University Total		\$17,540
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Flinders University

School of Chemistry and Physical Sciences

10/125	Dr Amanda Ellis Real carboxyl concentration on acid treated carbon nanotubes using radiolabeling technology	\$18,995
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10/030	Dr Rachel Popelka-Filcoff Elemental characterization of Australian ochre by neutron activation analysis (NAA) and particle induced x-ray emission (PIXE)	\$42,115
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Yunggorendi First Nations Centre for Higher Education and Research

10/062	Mr Christopher Wilson Understanding mid-late Holocene life ways in Ngarrindjeri Ruwe: an archaeological study of the Lower Murray River, South Australia	\$7,935
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Flinders University Total		\$69,045
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Griffith University

Faculty of Science, Environment, Engineering and Technology

10/105	Dr Andrew Brooks Determining Eucalyptus tree ages using bomb-pulse radiocarbon ¹⁴ C dating to define alluvial gully erosion rates in northern Australia	\$9,920
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10/119	Dr Jisheng Han SIMS analysis on SiC epitaxy film on Si	\$6,830
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Griffith University Total		\$16,750
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James Cook University

Faculty of Science & Engineering

10/061	Professor Michael Bird Environmental degradation of charcoal	\$16,670
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10/138	Associate Professor Mohan Jacob Investigation into the surface reactivity and transport properties of plasma polymerised organic polymer thin films	\$30,255
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10/091	Professor Bernd Lottermoser Application of SIMS to determine the mineralogical siting and distribution of heavy metals in contaminated topsoils, Broken Hill	\$13,240
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James Cook University Total		\$60,165
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La Trobe University

Faculty of Humanities and Social Sciences

10/033	Dr Richard Cosgrove Coping with climate extremes: prehistoric aboriginal occupation in the Flinders Ranges SA	\$5,280
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Faculty of Science, Technology and Engineering

10/084	Dr Peter Barnard New chelating N-heterocyclic carbene ligands for the development of ^{99m} Tc- and ⁶⁸ Ga-based molecular imaging agents	\$20,400
10/109	Dr Peter Green ¹⁴ C Bomb-pulse verification of uncertain tree-ring chronologies in the Mallee Pine <i>Callitris verrucosa</i>	\$13,440
10/078	Dr Paul Pigram Determination of the age and origin of Lightning Ridge black opal	\$12,160
10/107	Professor Caixian Tang Use of microPIXE for cellular localisation and elemental mapping of zinc and cadmium in the leaves of Zn/Cd-hyperaccumulating plants	\$17,880
10/050	A/Professor Brian Usher SIMS measurements to assist the determination of nitrogen composition in dilute nitride semiconductors	\$14,060
10/112	A/Professor John Webb Catchment-scale water and salinity impacts of changing land use in south-west Victoria	\$12,850
La Trobe University Total		\$96,070

Macquarie University

Faculty of Science

10/042	Dr Paul Hesse Longitudinal connectivity of suspended sediment transport and in-channel sediment storage: lower Macquarie River, NSW	\$6,000
10/099	Dr Grant Hose Microanalysis of groundwater invertebrates to determine As tolerance and its mechanism	\$19,200
10/079	Dr Christopher Weldon Antenna response of gamma-irradiated Queensland fruit flies	\$5,400
Macquarie University Total		\$30,600

The University of Melbourne

Faculty of Engineering

10/1125	Dr Daniel Riley Engineering self-assembly of advanced materials	\$5,018
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Melbourne School of Land and Environment

10/148	Dr Russell Drysdale Assessment of climatic influences on ¹⁴ C activity in a Holocene stalagmite from Flores, Indonesia	\$7,000
10/094P	Dr Hugh Smith Determining sources of sediment delivered to streams after wildfire	\$25,824

Faculty of Medicine, Dentistry and Health Sciences

10/1170	Dr Cyril Curtain SANS studies on the structure of misfolding proteins in neurodegenerative diseases	\$1,660
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Faculty of Science

10/120	Dr Rachel Caruso Sequestration of heavy metals/radionuclides in titania-based beads	\$9,550
10/126	Dr Brett Johnson Hydrogen diffusion in amorphous germanium formed by ion implantation	\$16,830
10/1139	Professor Frances Separovic The location of antimicrobial peptides in phospholipid membranes determined by neutron techniques	\$3,440
10/103	Professor Ian Woodrow Use of microPIXE for cellular localisation of arsenic in the roots of Australian native trees	\$14,680

The University of Melbourne Total \$84,002

Monash University

Faculty of Arts

10/106	Professor Nigel Tapper Fingerprinting and characterising aeolian dust on the north-west coast of Australia	\$14,000
10/028	Mr Duncan Wright Dating early human settlement in the Torres Strait	\$3,520

Faculty of Engineering

10/1283	Dr Patrick Howlett <i>In-situ</i> neutron diffraction studies of Mg anodes for use in Mg/air batteries	\$4,160
10/121P	Dr Raman Singh SIMS characterisation of thin corrosion layers developed over nanocrystalline Fe-Cr alloys	\$16,440
10/0888	A/Prof Kiyonori Suzuki Temperature dependence of spin disorder in magnetic nanocomposites	\$940

Faculty of Pharmacy and Pharmaceutical Sciences

10/057	Dr Ben Boyd The use of SAXS to study the interaction with plasma components with liquid crystal particles for drug delivery applications	\$12,950
10/1308	Mr Adam Tilley Deuteration of lyotropic liquid crystal forming lipids for structural investigations using neutron scattering	\$1,440
10/1306	Mr Adam Tilley Investigations into the surface structure of lyotropic liquid crystal nanoparticles (cubosomes) by neutron scattering and phase contrast using SANS	\$1,660

Faculty of Science

10/116	Dr Patrick Baker Identifying tree species of dendrochronological potential in Far North Queensland: a hierarchical approach using AMS ¹⁴ C	\$6,720
10/114	Dr Patrick Baker Testing models of coexistence in tropical tree species: radiocarbon dating to verify temporal recruitment fluctuations	\$17,920

10/1013	Ms Donna Menzies A comparative deuterated and protonated PEG-like plasma polymer neutron reflectometry study	\$2,475
10/1182	Dr David Turner Neutron diffraction study of hydrate-clathrate chains in a metal-organic material	\$1,270
10/0840	A/Prof Matthew Wilce Determination of the spatial relationship of large serine recombinase TnpX and its cognate DNA	\$1,430
Monash University Total		\$84,925

Murdoch University

Faculty of Minerals and Energy, Chemical and Mathematical Sciences

10/053	Dr Manickam Minakshi Electrochemical studies of the environmental friendly battery materials	\$24,430
Murdoch University Total		\$24,430

University of New England

Faculty of Arts and Sciences

10/100	Dr Peter Lockwood Determination of mean residence time (MRT) of soil organic matter pools by C-14 radiocarbon measurement	\$28,425
University of New England Total		\$28,425

University of Newcastle

Faculty of Engineering and Built Environment

10/066P	Professor Bogdan Dlugogorski Fixation of atmospheric CO ₂ in carbonates derived from ultramafic rocks in New South Wales	\$15,050
10/1140	Professor Erich Kisi <i>In situ</i> neutron diffraction study of micro-mechanics and single crystal elastic constants	\$3,280
10/1451	Professor Erich Kisi Texture development in hot-pressed MAX phases	\$1,456
10/089	Professor Garry Willgoose Vertical distribution, turnover and characterisation of soil organic carbon in particle-size fractions as influenced by soil texture	\$18,900

Faculty of Science and Information Technology

10/1127	Dr Rob Atkin Adsorption and structure at ionic liquid interfaces	\$7,904
10/1320	Dr Rob Atkin Morphology of polyethylene oxide dissolved in ethylammonium nitrate	\$2,606
University of Newcastle Total		\$49,196

The University of New South Wales

ADFA@UNSW

10/1341	Mr Maciej Bartkowiak Structure determination of ferroelectric phase of strontium titanate with isotopic O-18	\$715
10/134	Dr Wayne Hutchison Magnetic structures in RNiAl ₄ via low temperature nuclear orientation	\$3,000
10/1242	Dr Annemieke Mulders Neutron diffraction of multiferroic hexaferrite in applied magnetic and electric field	\$2,735
10/1261	Dr Annemieke Mulders Manipulation of magnetic order in multiferroic LuFe ₂ O ₄ with electric field	\$3,210
10/1543	A/Professor Hans Reisen Single crystal neutron diffraction structure of NaMgAl(oxalate)3.9H ₂ O - an extraordinary spectral hole-burning material	\$1,210
10/137	Dr Glen Stewart Revisiting the orthorhombic phase manganite o-TmMnO ₃	\$4,600
10/1324	Dr Jianli Wang Crystal and magnetic structures of Mn-Ni-Ga-Co shape memory alloys	\$2,040

Faculty of Engineering

10/1355	Mr James Cornwell Commissioning of stop-flow apparatus on Quokka	\$387
10/1161	Mr Tsai Ping-Han Oxygen dependent Na _x CoO ₂ crystal structure	\$2,777

Faculty of Science

10/088	Dr Catherine Chague-Goff Establishing the recent history of catastrophic coastal inundations in Pololu Valley, Hawaii	\$14,800
10/1272	Dr John Stride Low temperature diffraction study of Fe-acacn	\$497
10/1332	Dr John Stride Spin dynamics and magnetic structure of two high T _c molecule-based magnets	\$3,088
10/040	Dr Matthew Taylor Energy flow in freshwater impoundments: where does it come from and where does it go?	\$8,740
10/145	Dr Matthew Taylor Feeding ecology of mado (<i>Atypichthys strigatus</i>) and the Coriolis effect on coastal to estuarine tidal flow	\$9,600
10/1224	Dr Pall Thordarson SANS study on the structure and kinetics of self-assembled gels for biomedical applications	\$774
10/140	Dr Pall Thordarson Structural evolution of self-assembled gels for biomedical applications	\$8,430
10/1337	Dr Clemens Ulrich Precise crystallographic and magnetic structure of the spinel compound FeCr ₂ S ₄	\$607

Faculty of Medicine

10/027	Dr Andrew Herries Dating Iron Age migrations using charcoal and opercula and the creation of a South African archaeomagnetic curve	\$2,640
10/074	Dr Andrew Herries The geological age and time of extinction of a new Caprine species (family Bovidae) from South Africa	\$5,600

The University of New South Wales Total \$75,450

Otago University

Division of Sciences

10/075	Dr Katherine Lilly Quantifying ice extent in New Zealand at the Last Glacial Maximum through cosmogenic exposure dating of bedrock surfaces	\$16,506
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University of Otago Total \$16,506

University of Queensland

Faculty of Engineering, Architecture and Information Technology

10/118	Prof Paul Lant Transformation and distribution of fossil carbon in wastewater treatment pathway, from input to discharge	\$23,070
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Faculty of Science

10/0828	Ms Xiaojing Chen Structural comparison of linear and branched PEGs-preliminary study towards understanding of structure of PEG-protein conjugates	\$850
10/046	A/Prof Massimo Gasparon Application of natural radioactive radon as groundwater tracer in wetlands system	\$7,800
10/0585	Professor Ian Gentle Determining analyte diffusion into explosive sensing films	\$4,880
10/1216	Dr Lizhong He Elucidating the structure-function relationship for protein-polymer conjugates: a comparison of linear and branched PEGs	\$1,920
10/0956	Dr Kevin Jack Surfactant mediated organic reactions in water - SANS	\$3,840
10/115	Dr Samuel Marx Can mosquito egg shells and Y/Ho ratios be used as proxies of palaeo and geomorphic change in coastal estuarine environments?	\$7,280
10/067	Dr Patrick Moss Last Glacial Maximum environments of North Stradbroke Island, South East Queensland	\$9,680
10/117	Professor John Pandolfi Constructing long-term proxy records of historical changes for mollusc assemblages in Moreton Bay	\$7,920
10/044P	Professor James Shulmeister Ecological and limnological history of the Ashburton Lakes region, South Island, New Zealand	\$19,200
10/1327	Dr Andrew Whitten Structural characterisation of the Munc18a-Syntaxin1a complex	\$1,700
10/076	A/Professor Jian-xin Zhao Holocene marine ¹⁴ C reservoir age variability in Moreton Bay, Southeast Queensland	\$17,700

Faculty of Social and Behavioural Sciences

10/069	Dr Andrew Fairbairn Dating the emergence of agriculture in the Konya Plain, Turkey	\$4,920
10/064	Dr Sean Ulm Using marine shell to date the dedicatory Caches of Copán, Honduras	\$10,560
10/071	Dr Marshall Weisler Refining the deltaR for central East Polynesia with U-series dated archaeological corals	\$14,160

University of Queensland Total \$135,480

Queensland University of Technology

Faculty of Built Environment and Engineering

10/054	Dr Tuquabo Tesfamichael Thermally evaporated WO ₃ thin films for gas sensing applications	\$7,140
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Faculty of Science and Technology

10/024	Dr Luke Nothdurft Testing environmental stress on a dead Holocene coral reef in Moreton Bay, Queensland	\$4,400
10/141P	Professor Huai Yong Zhu Removal of radioactive ions from water and immobilizing them with titanate nanofibres and nanotubes	\$20,360

Queensland University of Technology Total \$31,900

RMIT University

College of Science Engineering and Health

10/012	Professor Suresh Bhargava An investigation on the influence of crystallinity on uranium dissolution from the uranium bearing ore mineral coffinite	\$16,940
10/1290	Professor Gary Bryant Deuterated lipids for the study of membrane domains and rafts using SANS and reflectometry	\$1,050
10/1138	Professor Gary Bryant Hydrocarbon gelation under shear	\$1,160
10/124	Professor David Mainwaring Irradiation produced nanostructures in polymeric thin films	\$27,480
10/085	Dr Jessica Reeves The Barwon Estuary - assessing the past to inform the future	\$15,350
10/051	Dr Anthony Holland Composition analysis and electrical properties of germanide-semiconductor interfaces	\$14,460
10/122	Dr Anthony Holland Etching microfeatures in lithium niobate using a novel process	\$6,920

RMIT University Total \$83,360

Southern Cross University

Faculty of Arts and Sciences

10/041	Dr Malcolm Clark Reversibility of Ra and Sr uptake on modified bauxite refinery residues	\$39,130
10/102	Dr Annabelle Keene Controls on the reductive dissolution of natural jarosite in a tidally inundated acid sulfate soil wetland	\$14,535
10/095	Dr Vanessa Wong Characterising nano-particulate iron minerals formed in acid sulfate soils following seawater inundation	\$12,135

Southern Cross University Total \$65,800

University of South Australia

Ian Wark Research Institute

10/058	Dr Dusan Losic Probing of molecular transport of nanopore and nanotube membranes using radio tracer (RT) technology	\$13,105
10/1118	Dr Akira Otsuki Measurement of distance between dielectric particles under the electric field by small-angle neutron scattering	\$895
University of South Australia Total		\$14,000

Swinburne University

Faculty of Engineering & Industrial Science

10/1416	Mr Rezwanul Haque Residual stress and deformation in SPR joints of high strength material	\$1,265
10/0151	Mr Rezwanul Haque Residual stress and deformation in SPR joints of high strength material	\$1,380
10/133	Dr Paul Stoddart Demonstration of oxidation barrier coatings on nanostructured metal surfaces	\$9,380
Swinburne University Total		\$12,025

The University of Sydney

Faculty of Agriculture, Food and Natural Resources

10/038	Professor Les Copeland Environmental and seasonal effects on the internal structure of wheat starch granules	\$6,210
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Faculty of Arts

10/023	Professor Daniel Potts AMS dating of an Achaemenid royal site at Qaleh Kali (Iran)	\$8,800
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Faculty of Engineering and Information Technologies

10/150	A/Professor Andrew Ruys Porous refractory carbides	\$2,550
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Heart Research Institute

10/082	Professor Michael Davies How does the structure of nitroxides modulate their efficacy as antioxidants against protein-derived free radicals?	\$7,310
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Faculty of Science

10/056	Professor Marcela Bilek Composition of TCO and MAX alloys: effects of effects of discharge pulse power and shape	\$44,800
10/1231	Dr Paul Fitzgerald SANS and SAXS on colloidal Ln ₃ doped nanoparticles and PbS(e) quantum dots	\$760
10/047	Dr Stephen Gale Bound for Botany Bay: archival and sedimentological records of Australia at the point of European contact	\$4,800

10/072	Dr Stephen Gale Dating the Aboriginal abandonment of Kangaroo Island	\$3,520
10/110P	Professor Trevor Hambley Modifying physical and chemical properties of platinum anti-cancer complexes to enhance degree of tumour penetration	\$12,850
10/136	Dr Brian Hawkett Do we really understand the kinetics of emulsion polymerization?	\$4,420
10/139	Professor Brendan Kennedy Neutron diffraction studies of cation and anion ordering in Sm and Gd containing oxides	\$10,300
10/1235	Professor Cameron Kepert Characterisation of a guest-induced, reversible magnetic transformation of a nanoporous coordination framework	\$980
10/039	Professor Peter Lay STIM and PIXE mapping of diseased cerebral and other tissues	\$25,650
10/1168	Dr Siegbert Schmid <i>In-situ</i> and <i>ex-situ</i> Li insertion and extraction of cathode material $\text{Li}_{0.18}\text{Sr}_{0.66}\text{Ti}_{0.5}\text{Nb}_{0.5}\text{O}_3$	\$320
10/1004	Professor Jill Trehwella The structure of the HIV-1 matrix protein with human calmodulin	\$2,790
10/1305	Professor Gregory Warr Structure changes in micelles during polymerization of alkylpyridinium surfactants	\$1,520
The University of Sydney Total		\$137,580

University of Tasmania

Institute for Marine and Antarctic Studies

10/045	Dr Troy Gaston Response of plankton communities to changes in land-use and runoff in Tasmanian Estuaries	\$4,384
10/097	Professor Andrew McMinn ^{210}Pb & ^7Be dating of sediment cores from an estuarine coastal lake: a study into thermal plume impacts and the use of benthic diatoms as bioindicators of a power station cooling field	\$8,075

Faculty of Science, Engineering & Technology

10/090P	Dr Kerrie Swadling Establishing mercury bioaccumulation pathways to top predators within a contaminated Australian estuary	\$3,750
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University of Tasmania Total		\$16,209
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University of Technology, Sydney

Faculty of Science

10/128	Professor Abhi Ray Life-span prediction of cement-based construction materials	\$5,180
10/049	Professor Derek Eamus Measuring leaf, tree ring and phloem sap $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ of groundwater dependent ecosystems in a changing climate	\$1,350

University of Technology, Sydney Total		\$6,530
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The University of Western Australia

Faculty of Arts, Humanities and Social Sciences

10/111	A/Professor Jane Balme Dating vegetation change and fire regimes in late Holocene south west Australia	\$10,560
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Faculty of Engineering, Computing and Mathematics

10/055	A/Professor Adrian Keating Understanding passivated porous silicon films for enabling sensor and micromachined technologies	\$13,455
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Faculty of Life and Physical Sciences

10/1365	Mr Thomas Saerbeck Polarisation system commissioning	\$1,580
10/1253	Professor Alice Vrielink Neutron diffraction studies of cholesterol oxidase - studying the role of hydrogen atoms in oxidative catalysis	\$1,495
10/037	Professor John Watling Radiochemical separation of ⁶⁴ Cu and ⁵⁵ Co from proton-bombarded nat-nickel via non-aqueous ion-exchange chromatography	\$12,770

Faculty of Natural and Agricultural Sciences

10/063	A/Professor Geoffrey Batt Dynamic evolution of montane topography in a glaciated tropical environment - Mt Kinabalu, NW Borneo	\$9,473
10/101	Dr Jason Fellman Riverine export of organic matter from northwest Australia: is marine organic carbon of ancient origin?	\$3,520
10/104	Dr Grzegorz Skrzypek Trans-latitude migration of climatic zones during last millennia: inferences from stable isotopic composition of peat cores (radiocarbon dating)	\$9,455

The University of Western Australia Total		\$62,308
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University of Western Sydney

College of Health and Science

10/087	Dr Oula Ghannoum Impact of climate change on nitrogen uptake by Eucalyptus seedlings	\$5,058
10/080	Professor Thomas Millar Using x-ray reflectometry to understand the structure of the surface of the tear film	\$5,940

The University of Western Sydney Total		\$10,998
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University of Wollongong

Faculty of Engineering

10/1162	Dr Zaiping Guo Structural studies of Br-doped LiMn ₂ O ₄ and Li ₄ Ti ₅ O ₁₂ . <i>In-situ</i> electrochemical and neutron diffraction studies of Br-doped LiMn ₂ O ₄ and Li ₄ Ti ₅ O ₁₂	\$816
10/1212	Professor Valerie Linton Measurement of residual stresses around a shielded metal arc T-butt weld in thick section steel	\$1,005
10/1278	Professor Valerie Linton The influence of weld toe dressing on the residual stress distribution around T-butt welds in thick section steel	\$1,335

10/0687	Professor Valerie Linton Residual stress measurement in a butt weld from a full scale curved thick steel plate	\$1,720
10/1042	Mr Mark Reid Distribution and thermal stability of nanometer scale precipitates in low manganese steel	\$518
10/1287	Mr Mark Reid Phase evolution and ordering behaviour of advanced beta-gamma TiAl alloys	\$816
10/1262	Ms Kun Yan Thermophysical properties and transformation kinetics of the nuclear reactor structural material Zr-2.5Nb	\$408

Faculty of Health and Behavioural Science

10/083	Dr Todd Mitchell Fat for life: using accelerator mass spectrometry to determine the lifespan of human lens lipids	\$16,120
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Faculty Science

10/032	Professor Allan Chivas Amino acid racemisation and radiocarbon chronology of the post-glacial Danube Delta	\$10,560
10/147	Professor Allan Chivas Palaeoenvironmental and palaeoclimatic history of southern South America based on long sedimentary records from Laguna Llancañelo, Argentina	\$4,400
10/068	Dr Anthony Dosseto Age of groundwater flowing within uranium mineralisation	\$7,040
10/143	Dr Richard Gillespie Isotopes in wood cellulose and bone collagen	\$26,075
10/123	Dr Marc in het Panhuis Sorption performance of chitosan functionalised carbon nanotube membranes	\$16,300
10/077	Dr Helen McGregor Coral Sr/Ca records from PNG and Kiribati: an eastside-westside story of past El Niño variability	\$18,780
10/1260	A/Professor Aaron Oakley LinB neutron crystallography	\$234
10/1185	Dr Moeava Tehei Mapping protein dynamics conformational changes in replisomal macromolecular assemblies	\$1,696
10/1157	Dr Moeava Tehei Mapping protein conformational changes in replisomal macromolecular assemblies	\$816
10/073	Professor Colin Woodroffe Reef-island sedimentation determined by the age of reef-flat foraminifera	\$13,200

University of Wollongong Total \$121,839

TOTAL AINSE Research Awards \$1,655,066

Summary of experiments at ISIS

ISIS is situated in Oxfordshire in the United Kingdom, and is a world-leading centre for research in the physical and life sciences. AINSE coordinates funding for Australia's membership of ISIS. 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. Our application to the ARC for a five year LIEF grant was successful and we were awarded \$1,000,000 over five years from 2008, in support of the membership fee to ISIS. This represents 50% of the membership fee. By paying a membership fee Australian researchers may compete for instrument time in ISIS competitive rounds. The time granted is several times that which could be bought for \$400,000.

Applications from Australian researchers for 2010 resulted in 22 days being awarded to 6 proposals from 4 groups. Instrument time was awarded on 4 different instruments. The reduced access in 2010 is a result of a long scheduled shutdown from August 2010, with a restart in March 2011. The long shutdown was required to carry out some highly critical obsolescence work, such as changing the proton exit window on the extracted proton beamline on the first target station.

The outcome of the UK government spending review for the Research Councils was announced on 20 December 2010. Although the science budget as a whole has been relatively protected, this does not apply equally to all areas. Unfortunately the funding for ISIS operations is being reduced and it will only be able to operate for 2/3 of their nominal baseline. However, because of the new instruments in Target Station 2 the total number of instrument days available will only decrease by a few percent compared to 2008 and the overall capability of the ISIS instrument suite has increased significantly thanks to an ongoing program of instrument upgrade and development. We therefore expect ISIS to maintain the level of scientific productivity compared to 2008. In addition, they have indicated that they will give higher priority to proposals from international partners so as not to penalise us by the reduction in UK funding.

Chief Investigator/Organisation/Project Title/Instrument	Days
Atkin Dr R University of Newcastle Effect of variation in the anion on the bulk nanostructure of protic ionic liquids SANDALS	3
Atkin Dr R University of Newcastle Structure of adsorbed surfactant layers at the ethanoalammonium nitrate/air interface INTER	4
Gray Professor E M Griffith University Violation of γ -scaling in D_2 : test of existing theories VESUVIO	6
Howard Dr C J University of Newcastle Neutron analysis of the structure of $SrAl_2O_4$ from 300K to 1273K HRPD	4
Kennedy Dr B J The University of Sydney Triclinic-monoclinic phase transition in Ba_2LaIrO_6 . Establishing the role of non-rigid octahedra HRPD	2
Kennedy Dr B J The University of Sydney Phase transitions and orbital ordering in $SrRu_{1-x}Cu_xO_3$ HRPD	3

Kisi Dr E H University of Newcastle Exploration of elastic anisotropy in nanolaminate MAX phases ENGIN_X	5
Ling Dr C D The University of Sydney Elucidation of the low-temperature spin and/or charge ordered states of $Ba_3BiIr_2O_9$ and $Ba_3LaIr_2O_9$ HRPD	3
Low Dr I M Curtin University of Technology <i>In-situ</i> study of self-recovery in MAX phases POLARIS	3
Other experiments on which Australians and New Zealanders were co-investigators	
Kemmitt Dr T & Bengel Mrs K Industrial Research Ltd Me-ND311BD4: a temperature dependent study of its crystal structure and decomposition products HRPD	4
Kemmitt Dr T & Bengel Mrs K Industrial Research Ltd Investigation of molecular rotation and disorder in methylamine borane ($CH_3NH_2BH_3$) and methylammonium borohydride ($[CH_3NH_3]^+[BH_4]^-$) TOSCA	3
Kearley Professor G J ANSTO The super proton conductors $(H_3O)SbTeO_6$ and $Rb_3H(SO_4)_2$. Comparison of proton momentum distributions and H^+ mobilities VESUVIO	4

Publications relating to research at ISIS

- Wakeham D; Niga P; Rutland M; Warr G G; Atkin R
Nonionic surfactant adsorption at the ethylammonium nitrate surface: a neutron reflectivity and vibrational sum frequency spectroscopy study
Langmuir 26 8313 2010
- Regini J W; Ecroyd H; Meehan S; Bremmell K; Clarke M J; Lammie D; Wess T; Carver J A
The interaction of unfolding α -lactalbumin and malate dehydrogenase with the molecular chaperone α B-crystallin: a light and x-ray scattering investigation
Mol Vis 16 2446-2456 2010
- Carver J
X-ray and neutron scattering studies of the molecular chaperone α -crystallin enables localization of ligand binding sites
9th AINSE/ANBUG Neutron Scattering Symposium 24 2010 December
- Finlayson T R; Davidson C J; Fitzpatrick M E; Griffiths J R; Oliver E C; Wang Q G
Stresses borne by inclusions in a model metal-matrix composite under load
19th AIP National Congress of Physics 91 Melbourne December 2010
- Goossens D J; Welberry T R
Approaches to modelling diffuse scattering from molecular crystals: para-terphenyl ($C_{18}H_{14}$).
Metall Mater Trans A 41A 1119-1129 2010
- Gray E MacA; Bailey I F
Embrittlement of titanium-zirconium null-matrix alloy by deuterium
Journal of Neutron Research 16 27 2008
- Harrison R J; McEnroe S A; Robinson P; Howard C J
Spin orientation in a natural Ti-bearing hematite - evidence for an out-of-plane component
American Mineralogist 95 974-979 2010
- Carpenter M A; McKnight R E A; Howard C J; Knight K S
Symmetry and strain analysis of structural phase transitions in $Pr_{0.48}Ca_{0.52}MnO_3$
Physical Review B 82 094101 18pp 2010

- Peterson V K; Kearley G J; Wu Y; Ramirez-Cuesta A J; Kemner E; Kepert C J
Local vibrational mechanism for negative thermal expansion: a combined neutron scattering and first-principles study
Angew Chem Int Edit 49 585-588 2010
- Zhang Z; Kennedy B J; Howard C J; Jang L-Y; Knight K S; Matsuda M; Miyake M
X-ray absorption and neutron diffraction studies of $(\text{Sr}_{1-x}\text{Ce}_x)\text{MnO}_3$ - transition from coherent to incoherent static Jahn-Teller distortions
J Phys-Condens Mat 22 445401 8pp 2010
- Styles M D; Riley D P; Madsen I C; Kisi E H
Parametric Rietveld refinement applied to *in situ* diffraction studies
Proceedings of the 34th Australian and New Zealand Condensed Matter Physics Conference 79 February 2010
- Kirstein O; Zhang J F; Kisi E H; Riley D P; Styles M J; Paradowska A
Single crystal elastic constants of the MAX phase Ti_3AlC_2 determined by neutron diffraction
Mat Sci Forum 638-642 2417-2422 2010
- Kisi E H; Zhang J F; Kirstein O; Riley D P; Styles M J; Paradowska A M
Shear stiffness in nano-laminar Ti_3SiC_2 challenges *ab initio* calculations
J Phys-Condens Mat 22 162202 2010
- Pang W K; Low I M; Kennedy S J; Smith R I
In situ diffraction study on the thermal stability of Ti_2AlN at 1500-1800°C in vacuum
Mater Sc Eng A 528 137-142 2010
- Low I M; Pang W.K; Kennedy S.J; Smith R.I
High-temperature thermal stability of Ti_2AlN and Ti_4AlN_3 : a comparative diffraction study
J Eur Ceram Soc 31 159-166 2011
- Low I M; Pang W K; Kennedy S J Smith R I
Diffraction study of high-temperature thermal stability of MAX phases in vacuum
Proc 34th Int Conf on Advanced Ceramics & Composites (ICACC) 31 171-180, Daytona Beach, Florida, USA CESP Jan 2010 2010
- Low I M; Pang W K; Kennedy S J; Wu E; Smith R I
High-temperature thermal stability of Ti_2AlN and Ti_4AlN_3 : comparative diffraction study
9th AINSE/ANBUG Neutron Scattering Symposium 69 December 2010
- Muránsky O; Barnett M R; Carr D G; Vogel S C; Oliver E C
Investigation of deformation twinning in a fine-grained and coarse-grained ZM20 Mg alloy: Combined *in situ* neutron diffraction and acoustic emission
Acta Mater 58 1503-1517 2010
- Muránsky O; Barnett M R; Luzin V; Vogel S
On the correlation between deformation twinning and Lüders-like deformation in an extruded Mg alloy: *in situ* neutron diffraction and EPSC.4 modelling
Mat Sci Eng A-Struct 527 1383-1394 2010
- Reynolds P A; McGillivray D J; Mata J P; Yaron P N; White J W
Emulsions at low surfactant concentration studied by small angle neutron scattering.
J Colloid and Interface Science 349 544-553 2010
- Lin J-M; White J W
Denaturation resistance of beta-lactoglobulin in monomolecular films at the air-water interface
J Phys Chem B 113 14513-14520 2009
- Ang J C; Lin J-M; Yaron P N, White J W
Protein trapping of silica nanoparticles.
Soft Matter 6 383 - 390 2010
- Yaron P N; Reynolds P A; McGillivray D J; Mata J P; White J W
Nano- and microstructure of high-internal phase emulsions under shear
J Phys Chem B 114 3500-3509 2010

Publications

Notification of the following papers incorporating results from AINSE-supported projects was received by AINSE in 2010. This list may not contain all 2010 publications arising from AINSE supported work, nor does it necessarily relate to Awards held in 2010.

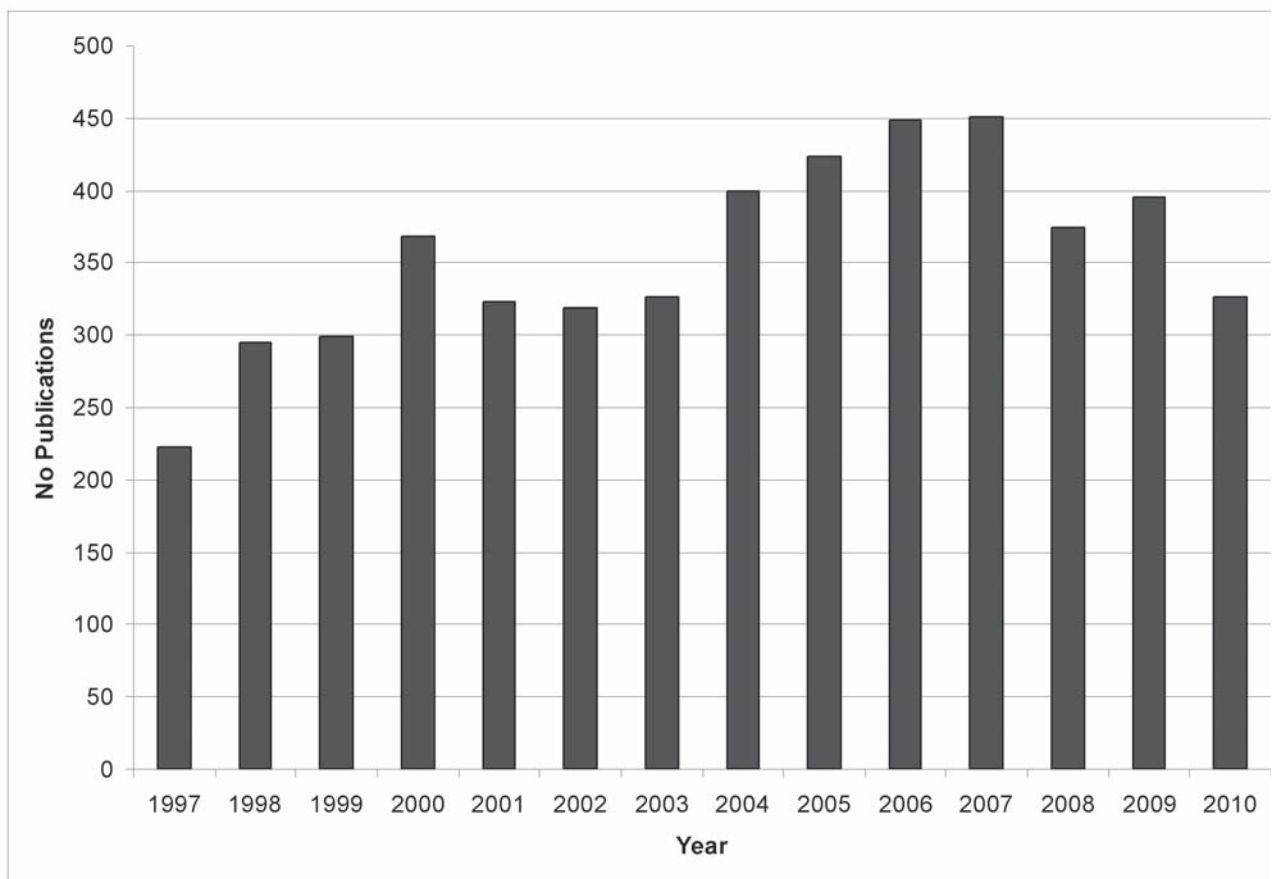
The publications are listed in university order, with the name of the chief investigator(s) in bold. Where the chief investigator is not an author the name is in brackets. Publications arising from AINSE Postgraduate Research Awards (PGRA) and Research Fellowships (FEL) are also listed.

The references are as supplied by the chief investigator in Progress Reports and other notifications provided to AINSE. The Progress Reports for AINSE Awards are published on the AINSE website.

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, city, 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			
PGRA	Barr C	Droughts and flooding rains: a fine-resolution reconstruction of climatic variability in western Victoria, Australia, over the last 1500 years	PhD Thesis 2010
05/062	Gell P	With the benefit of hindsight: the utility of palaeoecology in wetland condition assessment for restoration	In: Batty L, Hallberg K & Jarvis A P (eds) Ecology of Industrial Pollution: Remediation, Restoration and Preservation 162-188 2010
ISIS	Regini J W; Ecroyd H; Meehan S; Bremmell K; Clarke M J; Lammie D; Wess T; Carver J A	The interaction of unfolding a-lactalbumin and malate dehydrogenase with the molecular chaperone aB-crystallin: a light and X-ray scattering investigation	Mol Vision 16 2446-2456 2010
ISIS	Carver J	X-ray and neutron scattering studies of the molecular chaperone a-crystallin enables localization of ligand binding sites	9th AINSE/ANBUG Neutron Scattering Symposium 24 2010 December
PGRA; 05/162P	Natt A; Tibby J; Zawadski A; Harrison J	Copper in reservoirs: the Warren Reservoir experience	In: C B Daniels (ed) Adelaide: Water of a City. Wakefield Press, Adelaide 370-371 2010
96/080; 98/008	Bourman R P; Prescott J R; Banerjee D; Alley N F; Buckman S	Age and origin of alluvial sediments within and flanking the Mount Lofty Ranges, South Australia - a Late Quaternary archive of climate and environmental change	Aust J Earth Sci 57 175-192 2010
01/114	Murray-Wallace C V; Bourman R P; Prescott J R; Williams F; Price D M; Belperio AP	Aminostratigraphy and thermoluminescence dating of coastal aeolianites and the later Quaternary history of a failed delta: the River Murray Mouth Region South Australia	Quat Geochronol 5 28-49 2010
02/102	Brugger J; Oigerman J; Pring A; Waldron H <i>et al</i>	Origin of the secondary REE-minerals at the Paratoo copper deposit near Yunta	Mineralogical Magazine 70 609-627 2006
09/629	Xia F; O'Neill B; Ngothai Y; Peak J; Tenaillau C; Etschmann B; Pring A <i>et al</i>	A thermosyphon driven hydrothermal flow-through cell for <i>in situ</i> and time- resolved neutron diffraction studies	J Appl Crystallogr 43 511-519 2010
09/629	Brugger J; McFadden A; Lenahan C E; Etschmann B; Xia F; Zhao J; Pring A	A novel route for mesoporous materials synthesis by coupled dissolution-precipitation reactions: mimicking hydrothermal mineral formation	Chimia 64 693-699 2010
09/629	Xia F; Qian G; Brugger J; Studer A; Olsen S; Pring A	A large volume cell for <i>in situ</i> neutron diffraction studies of hydrothermal crystallizations	Review of Scientific Instruments 81 105107 2010
00/165	Williams M A J	Cenozoic climates in deserts	In: A J Parsons and A D Abrahams (eds) Geomorphology of Desert Environments, 799-824 2009 2nd edition Springer Berlin
06/196	Williams M A J; Talbot M R	Late Quaternary environments in the Nile basin	In: H J Dumont (ed) The Nile. Monographiae Biologicae 89 61-72 2009 Springer, Dordrecht
06/196	Talbot M R; Williams M A J	Cenozoic evolution of the Nile basin	In: H J Dumont (ed) The Nile. Monographiae Biologicae 89 37-60 2009 Springer, Dordrecht
06/196	Williams M A J	Human impact on the Nile basin: past, present, future	In: H J Dumont (ed) The Nile. Monographiae Biologicae 89 771-779 2009 Springer, Dordrecht
08/125	(Williams M A J); Haberlah D	Loess and floods: late pleistocene fine-grained valley-fill deposits in the Flinders Ranges, South Australia	PhD Thesis 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
09/005	Allen M S; McAlister A	The Hakaea Beach site, Marquesan colonisation, and models of East Polynesian settlement	Archaeology in Oceania 45 54-65 2010
07/001; 06/002	Allen M S	Morphological variability and temporal patterning in Marquesan domestic architecture: Anaho Valley in regional context	Asian Perspectives: the Journal of Archaeology for Asia and the Pacific 48 342-381 2010
07/130	Molloy C; Shane P; Augustinus P	Eruption recurrence rates in a basaltic volcanic field based on tephra layers in maar sediments: implications for hazards in the Auckland volcanic field	Geol Soc Am Bull 121 1666-1677 2009
07/130	Augustinus P; Barton C E; Harle K; Zawardi A	Lithological and geochemical record of mining-induced changes in sediments from Macquarie harbour, southwest Tasmania, Australia	Environmental Earth Sciences 61 625-640 2010
09/005	Huebert J M; Allen M S; Wallace R	Polynesian earth ovens and their fuels: wood charcoal remains from Anaho Valley, Nuku Hiva, Marquesas Islands	J Polynesian Soc 119 61-97 2010
06/210	Lucier B E G; Tang J A; Schurko R W; Bowmaker G A; Healy P C; Hanna J V	Solid-state ⁶⁵ Cu and ³¹ P NMR spectroscopy of bis(triphenylphosphine) copper species	J Phys Chem C 114 7949-7962 2010
PGRA	Knobloch J J; Jackson A J; McGillivray D J	Structure of casein micelles under high-pressure	9th AINSE/ANBUG Neutron Scattering Symposium 66 December 2010 978-0-9807455-0-1
PGRA	Lee J; Metson J; Evans P J; Pal U; Bhattacharyya D	Comparison of implantation and diffusion behavior of Ti, Sb and N in ion-implanted single crystal and polycrystalline ZnO: a SIMS study	Appl Surf Sci 256 2143-2146 2010
FEL	Xun Y; James M; Knott R; Dingley A J; McGillivray D J	Characterising the interaction between pore-forming antimicrobial protein and membranes	9th AINSE/ANBUG Neutron Scattering Symposium 54 December 2010 978-0-9807455-0-1
FEL	Tremouilhac P; Knott R; Gilbert E P; Dingley A J; McGillivray D J	Using SAXS and SANS to characterise the complex formed between the antimicrobial protein hydramacin-1 and fast-tumbling bicelles	9th AINSE/ANBUG Neutron Scattering Symposium 55 December 2010 978-0-9807455-0-1
FEL	Singh R; Melton L D; Zhang J; Worcester D L; Gilbert E P; McGillivray D J	The role of antioxidant-protein interactions in phospholipid membranes	9th AINSE/ANBUG Neutron Scattering Symposium 2 December 2010 978-0-9807455-0-1
FEL	Chi N-C; Knobloch J J; Nelson A J; James M; McGillivray D J	Probing oxidative stress on cellular membranes	9th AINSE/ANBUG Neutron Scattering Symposium 51 December 2010 978-0-9807455-0-1
FEL	Smith M B; McGillivray D J; Genzer J; Lösche M; Kilpatrick P K	Neutron reflectometry of supported hybrid bilayers with inserted peptide	Soft Matter 6 862-865 2010
06/127P	Nguyen C L; Atanacio A; Zhang W; Prince K E; Hyland M M; Metson J B	Phase-oriented surface segregation in an aluminium casting alloy	Appl Surf Sci 255 4880-4885 2009
06/127P	(Metson J); Nguyen C L	Surface properties and finishing of aluminium casting alloys	PhD Thesis 2009
09/0638	Perander L M; Metson J B	Elucidating alumina micro- and nanostructure by neutron and x-ray techniques	9th AINSE/ANBUG Neutron Scattering Symposium 72 December 2010 978-0-9807455-0-1

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
1982	Spriggs M; Bird R; Ambrose W	A re-analysis of the Tikopia obsidians	Archaeol Oceania 45 31–38 2010
90/054	Ambrose W; Allen C; O'Connor C; Spriggs M; Reepmeyer C; Oliveira N V	Possible obsidian sources for artefacts from Timor: narrowing the options using chemical data	J Archaeol Sci 36 607-15 2009
07/037	Gouramanis C; Wilkins D; De Deckker P	6000 years of environmental changes recorded in Blue Lake, South Australia, based on ostracod ecology and valve chemistry	Palaeogeogr Palaeoclimatol 297 223-237 2010
06/056	Forster M A; Lister G	Seismogenic strain rates during ductile deformation - the example of the South Cyclades shear zone	Int J Earth Earth Planet Sci 191 1-12 2007
06/056	Beltrando M; Lister G; Forster M A; Dunlap J; Fraser G; Hermann J	Dating microstructures by the $^{40}\text{Ar}/^{39}\text{Ar}$ step-heating technique: deformation-pressure temperature-time history of the Penninic units of the Western Alps	Rend Soc Geol It 5 pp 31 2007
FEL	Chan E J; Welberry T R; Goossens D J <i>et al</i>	A diffuse scattering study of aspirin forms I and II	Acta Crystallogr B 66 696-707 2010
FEL	Goossens D	Dipolar anisotropy in quasi-2D honeycomb antiferromagnet MnPS_3	European Physical Journal B 78 305-309 2010
FEL	Chan E J; Welberry T R; Goossens D J; Heerdegen A P	A refinement strategy for Monte Carlo modeling of diffuse scattering from molecular crystal systems	J Appl Crystallogr 43 913-915 2010
FEL	Goossens D J; Studer A J; Stachurski Z H	Microstructure of horseshoe nails using neutron diffraction	J Mater Eng Perform 19 380-384 2010
FEL	Whitfield R E; Goossens D J; Studer A J	Study of phase formation in metal injection moulding through real time neutron diffraction	J Phys: Conf Series 251 012048 2010 DOI:10.1088/1742-6596/251/1/012048
FEL	Welberry T R; Goossens D J; Withers R L; Baba-Kishi K Z	Monte Carlo simulation study of diffuse scattering in PZT, $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$	Metall Mater Trans A 41A 1110-1118 2010
FEL	Goossens D J; Welberry T R	Approaches to modelling diffuse scattering from molecular crystals: para-terphenyl ($\text{C}_{18}\text{H}_{14}$)	Metall Mater Trans A 41A 1119-1129 2010
FEL	Welberry T R; Chan E J; Goossens D J; Heerdegen A P	Use of Monte-Carlo simulation for the interpretation and analysis of diffuse scattering	Phase Transitions 83 80-98 2010
FEL	Goossens D J; Whitfield R E; Welberry T R; Paściak M	Short-range order in functional oxides	9th AINSE/ANBUG Neutron Scattering Symposium 31 December 2010 978-0-9807455-0-1
10/096P	Karlson L R; (Greene R); Scott K M; Stelcer E	Transport of aeolian dust west of the Lake Eyre Basin, Australia	ICAR VII International Conference on Aeolian Research 44 Santa Rosa, Argentina, July 2010
09/060	Karlson L R; Greene R S B; Scott K M; Stelcer E; Cresswell R	Source areas and characteristics of Aeolian material across northwest Australia	Atmosphere, Oceans, Environment and Society. 17th National Conference of Australian Meteorological and Oceanographic Society, The Australian National University 64 Canberra January 2010
09/060	Shiga Y; Greene R S B; Scott K M; Stelcer E; Cresswell R	Dust and terrestrial salt (NaCl) in SE Australia: implications for Aeolian co-transportation and co-deposition	Atmosphere, Oceans, Environment and Society. 17th National Conference of Australian Meteorological and Oceanographic Society, The Australian National University 107 Canberra January 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
10/096P	(Greene R); Karlson L R	Geochemical and physical characteristics of aeolian material west of the Lake Eyre Basin	Honours Thesis 2010
07/063	Haberle S G; Rule S; Roberts P; Heijnis H; Jacobsen G; Turney C; Cosgrove R; Ferrier A <i>et al</i>	Paleofire in the wet tropics of northeast Queensland, Australia	PAGES Newsletter 18 78-80 2010
07/063; 07/064	Bowman D M J S; Brown G K; Biogeography of the Australian monsoon tropics Braby M F; Brown J R; Cook L G; Crisp M D; Ford F; Haberle S; Hughes J <i>et al</i>		J Biogeogr 37 201-216 2010
07/064; 07/063; 10/118	Mooney S D; Harrison S P; Late Quaternary fire regimes of Australasia Bartlein P J; Daniau A-L; Stevenson J; Buckman S; Copper M; Luly J; Colhoun E; Dodson J; Haberle S <i>et al</i>		Quaternary Sci Rev 30 28-46 2010
PGRA	Hudspeth J M; Goossens D J; Welberry T R	Strategies for modelling short-range order in molecular crystals	9th AINSE/ANBUG Neutron Scattering Symposium 20 December 2010 978-0-9807455-0-1
09/0613	Liu Y; Norén L; Studer A J	<i>In situ</i> investigation of lead-free $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ piezoelectric ceramics under an electrical field via high intensity neutron powder diffraction	9th AINSE/ANBUG Neutron Scattering Symposium 8 December 2010 978-0-9807455-0-1
05/156	Stevenson J; Siringan F; Finn J; Madulid D; Heijnis H	Paoay Lake, Northern Luzon, Philippines: a record of Holocene environmental change	Global Change Biol 16 1672-1688 2010
05/157; 09/035	Stevenson J; Gillespie R; Hope G; Jacobsen G; Fallon S; Levchenko V	The archaic and puzzling record of Lake Xere Wapo, New Caledonia	In: Haberle, S, Stevenson, J, Prebble, M. (eds) <i>Altered Ecologies: fire, climate and human influence on terrestrial landscapes</i> . Terra Australis 32 381-393 2010 978-1-9216668-0-3
ISIS	Reynolds P A; McGillivray D J; Mata J P, Yaron P N; White J W	Emulsions at low surfactant concentration studied by small angle neutron scattering	J Colloid Interf Sci 349 544-553 2010
PGRA	Goossens D J; Whitfield R E; Welberry T R; Studer A J	Using bond valence sums to model short-range order	9th AINSE/ANBUG Neutron Scattering Symposium 59 December 2010 978-0-9807455-0-1
PGRA	Liss K D; Whitfield R E; Xu W; Buslaps T; Yeoh L A; Wu X L; Zhang D L; Xia K N	<i>In situ</i> synchrotron high-energy x-ray diffraction analysis on phase transformations in Ti-Al alloys processed by equal-channel angular pressing	J Synchrotron Radiat 16 825-834 2009
PGRA	Whitfield R E; Goossens D J; Studer A J	Neutron diffuse scattering of $\text{PbZn}_{1/3}\text{Nb}_{2/3}\text{O}$ on Wombat	9th AINSE/ANBUG Neutron Scattering Symposium 88 December 2010 978-0-9807455-0-1

University of Ballarat

04/216	Pearce D C; Dowling K; Gerson A R; Sim M R; Sutton S R; Russell R <i>et al</i>	Arsenic microdistribution and speciation in toenail clippings of children living in a historic gold mining area	Sci Total Environ 408 2590-2599 2010
09/084	Gowans S A; Gibson M S; Westbrooke M E; Pegler P	Changes in vegetation condition following kangaroo population management in Wyperfeld National Park	In: <i>Macropods: The Biology of Kangaroos, Wallabies and Rat-kangaroos</i> G Coulson and M Eldridge (eds) CSIRO Publishing, Collingwood 361-370 2010
09/064	(Gell P); Soeprbowati T R; Hadisusanto S	Comparative historical study of Lac Saint-Augustine Quebec-City, Canada and Rawapening Lake, Indonesia	Biota 14 60-69 2009

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
07/047	(FitzSimmons N); Featherston P	Food web dynamics and the dietary ecology of turtles in freshwater rivers of the Kimberley Plateau	Honours Thesis 2008

University of Canberra

University of Canterbury

07/127	(Russell G); El-Hadad O	Effects of cyclodextrins on the kinetics of emulsion polymerization	PhD Thesis 2010
07/140	Storey B C; Fink D; Hood D; Joy K; Shulmeister J; Riger-Kusk M; Stevens M I	Cosmogenic nuclide exposure age constraints on the glacial history of the Lake Wellman area, Darwin Mountains, Antarctica	Antarct Sci 22 603–618 2010

Charles Sturt University

08/130	Jessup J; Banos C; Lindhout K; Gurr G M; Reynolds O L	Rearing the biological control agent <i>Diachasmimorpha kraussi</i> (Fullaway) (<i>Hymenoptera: Braconidae</i>) on irradiated larvae of the queensland fruit fly, <i>Bactrocera tryoni</i> (Froggatt) (<i>Diptera: Tephritidae</i>)	Proceedings 8th International Symposium on Fruit Flies of Economic Importance. 223 Valencia 2010
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Curtin University of Technology

PGRA; 06/199; 06/263	Carroll M R J; Woodward R C; Amal R; Hanley T L <i>et al</i>	Experimental validation of proton transverse relaxivity models for superparamagnetic nanoparticle MRI contrast agents	Nanotechnology 21 035103 2010
10/146	Chaudhary D S; Went M; Nakagawa K; Buckman S; Sullivan J	Molecular pore size characterization within chitosan biopolymer using positron annihilation lifetime spectroscopy	Mater Lett 64 2635-2637 2010
PGRA	Mulders A M; Lawrence S M; Princep A J; <i>et al</i>	Circularly polarized soft x-ray diffraction study of helical magnetism in hexaferrite	Phys Rev B 81 092405 2010
PGRA	García-Fernández M; Staub U; Bodenthin Y; Mulders A M; Lawrence S M <i>et al</i>	Doping and temperature dependence of Mn 3d states in A-site ordered manganites	Phys Rev B 82 235108 2011
05/205	Low I M; Oo Z	Effect of grain size and controlled atmospheres on the thermal stability of aluminium titanate	AIP Conf Proc 27-31 2010
08/041	Pang W K; Low I M; O'Connor B H; Studer A J; Peterson V K; Palmquist J P	Diffraction study on the thermal stability of Ti ₃ SiC ₂ /TiC/TiSi ₂ composites in vacuum	AIP Conf Proc 44-48 2010
08/041	(Low I M); Phillips M	Novel synthesis of nanostructured TiO ₂ photoanodes for solar-hydrogen production	Honours Thesis 2010
09/606; 08/145; 08/041; 08/329	(Low I M); Pang W K	Phase and Thermal Stability of MAX Phases	PhD Thesis 2010
05/205; 06/112	Low I M; Oo Z	Diffraction study of thermal stability and self-recovery in Al ₂ TiO ₅	CESP 31 139-149 2010 Proc 34th Int Conf on Advanced Ceramics & Composites. (ICACC)
04/188	Low I M; Somers J; Kho HS <i>et al</i>	Fabrication and properties of recycled cellulose fibre-reinforced epoxy composites	Compos Interface 16 659-669 2009

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
08/329	Pang W K; Low I M; O'Connor B H; Studer A J; Peterson V K, Palmquist J-P	<i>In situ</i> diffraction study of thermal decomposition in Maxthal Ti ₂ AlC	J Alloy Compd 509 172-176 2011
08/329; 09/606	Pang W K; Low I M; Sun Z M	<i>In situ</i> high temperature diffraction study of thermal dissociation of Ti ₃ AlC ₂ in vacuum	J Am Ceram Soc 93 2871-2876 2010
ISIS	Low I M; Pang W K; Kennedy S J; Smith R I	High-temperature thermal stability of Ti ₂ AlN and Ti ₄ AlN ₃ . A comparative diffraction study	J Eur Ceram Soc 31 159-166 2011
05/106P	Pang W K; Low I M; Hanna J V	Detection of amorphous silica in air-oxidized Maxthal Ti ₃ SiC ₂ at 500 – 1000 °C by NMR and SIMS	Key Eng Mater 434-435 169-172 2010
ISIS	Pang W K; Low I M; Kennedy S J; Smith R I	<i>In situ</i> diffraction study on decomposition of Ti ₂ AlN at 1500-1800 degrees C in vacuum	Mat Sci Eng A-Struct 528 137-142 2010
08/041	Pang W K; Low I M; Hanna J V	Characterisation of amorphous silica in air-oxidised Ti ₃ SiC ₂ at 500-1000 degrees C using secondary-ion mass spectrometry, nuclear magnetic resonance and transmission electron microscopy	Mater Chem Phys 121 453-458 2010
08/041	Pang W K; Low I M; O'Connor B H; Sun Z M; Prince K E	Oxidation characteristics of Ti ₃ AlC ₂ over the temperature range 500-900 degrees C	Mater Chem Phys 117 384–389 2009
04/188	(Low I M); Sommers J; Kho H S; Al-Ghamedi R <i>et al</i>	Mechanical and physical properties of recycled cellulose fibre-reinforced epoxy eco-composites	Structural Integrity and Failure 41-42 317-322 2008
PGRA	Paskevicius M	A nanostructural investigation of mechanochemically synthesised hydrogen storage materials	PhD Thesis 2009
PGRA	Sheppard D A; Paskevicius M; Buckley C E	The mechanochemical synthesis of magnesium hydride nanoparticles	J Alloy Compd 492 L72-L74 2010
PGRA	Paskevicius M; Sheppard D A; Buckley C E	Thermodynamic changes in mechanochemically synthesized magnesium hydride nanoparticles	J Am Chem Soc 132 5077–5083 2010
PGRA	Veder J P; Patel K; Clarke G; Grygolicz-Silvester D S; De Marco R <i>et al</i>	Synchrotron radiation/Fourier transform-infrared microspectroscopy study of undesirable water inclusions in solid-contact polymeric ion-selective electrodes	Anal Chem 82 6203-6207 2010
PGRA	Veder J P; De Marco R	<i>In situ</i> structural characterization of electrochemical systems using synchrotron-radiation techniques	Trends in Analytical Chemistry 29S 528-537 2010

Deakin University

09/144	Salim N V; Hanley T; Guo Q	Microphase separation through competitive hydrogen bonding in double crystalline diblock copolymer/homopolymer blends	Macromolecules 43 7695–7704 2010
PGRA	Hameed N	Self-assembled diblock copolymer complexes via competitive hydrogen bonding	PhD Thesis 2010
PGRA	Hameed N; Guo QP	Natural wool/cellulose acetate blends regenerated from the ionic liquid 1-butyl-3-methylimidazolium chloride	Carbohydr Polym 78 999-1004 2009
PGRA	Hameed N; Guo QP	Blend films of natural wool and cellulose prepared from an ionic liquid	Cellulose 17 803-813 2010
PGRA	Xu ZG; Hameed N; Guo QP; Mai YW	Nanostructures and thermomechanical properties of epoxy thermosets containing reactive diblock copolymer	J Appl Polym Sci 115 2110-2118 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Hameed N; Salim NV; Guo QP	Microphase separation through competitive hydrogen bonding in self-assembled A-b-B/C diblock copolymer/homopolymer complexes	J Chem Phys 131 214905 2009
PGRA	Salim NV; Hameed N; Guo QP	Competitive hydrogen bonding and self-assembly in poly(2-vinyl pyridine)-block-poly(methyl methacrylate)/poly(hydroxyether of bisphenol a) blends	J Polym Sci Pol Phys 47 1894-1905 2009
PGRA	Liu J; Hameed N; Guo QP	Eutectic crystallization and hydrogen bonding interactions in polymer/surfactant blends	J Polym Sci Pol Phys 47 1015-1023 2009
PGRA	Hameed N; Guo Q; Hanley T; Mai Y-W	Hydrogen bonding interactions, crystallization and surface hydrophobicity in nanostructured epoxy/block copolymer blends	J Polym Sci Pol Phys 48 790-800 2010
PGRA	Hameed N; Guo QP	Self-assembled complexes of poly(acrylic acid) and poly(styrene)-block-poly(4-vinyl pyridine)	J Polym Sci Pol Phys 47 1192-1202 2009
PGRA	Hameed N; Guo Q; Xu Z; Hanley T L; Mai Y-W	Reactive block copolymer modified thermosets: highly ordered nanostructures and improved properties	Soft Matter 6 6119-6129 2010
PGRA	Nuhiji B	Structure and properties of epoxy nanocomposites	PhD Thesis 2009
PGRA	Rajkhowa R	Fabricating and characterising silk powder for biomedical and sorption applications	PhD Thesis 2009
PGRA	Rajkhowa R; Naik R; Wang L; Smith S V; Wang X	An investigation into transition metal ion absorption properties of silk fibres and particles using radioisotopes	J Appl Polym Sci 119 3630-3639 2010
09/132P	Naik R; Wen G; Dahrmaprakash MS; Wang X; Liu X; Cookson P G; Smith S V <i>et al</i>	Metal ion binding properties of novel wool powders	J Appl Polym Sci 115 1642-1650 2010
09/132P	Wen G; Naik R; Cookson P G; Smith S V; Liu X; Wang X G	Wool powders used as sorbents to remove Co ²⁺ ions from aqueous solution	Powder Technol 197 235-240 2010

Edith Cowan University

10/129	Wajrak M	Investigating the surface of solid gold electrode to improve the sensitivity of anodic stripping voltammetry for arsenic detection, arsenic in geosphere and human diseases	Arsenic 2010: Proceedings of the Third International Congress on Arsenic in the Environment 487 Taiwan 978-0-415-57898-1
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Flinders University

07/126P	Deslandes A; Jasieniak M; Ionescu M; Shapter J G; Quinton J S	Hydrogenation of sp ² -bonded carbon surfaces using methane plasma	Appl Surf Sci 256 1888-1894 2010
03/105	(Shapter J G); Wallace S J	Quantification of carboxylic functional groups on single walled carbon nanotubes	Honours Thesis 2006
06/254	(Shapter J G); Nussio M	The construction and microscopic characterisation of physiologically relevant membranes for use in drug binding studies	PhD Thesis 2009
10/062	Wilson C; Disspain M; Trevorrow T; Jacobsen G; Fallon S	Initial radiocarbon results and fish otolith analysis from the Lower Murray, SA	Australian Archaeological Association Annual Conference Abstracts 28 Canberra December 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
Griffith University			
09/050	Shellberg J G; Brooks A P; Spencer J; Knight J	Alluvial gully erosion rates across the Mitchell River fluvial megafan, Queensland, Australia	7th International Conference on Geomorphology http://www.geomorphology2009.com/cd-abstracts/Papers/373.pdf 373 2009 Melbourne
09/050	Shellberg J G; Brooks A P; Spencer J; Knight J; Pietsch T	Alluvial gully erosion rates and processes in Northern Queensland: an example from the Mitchell River fluvial megafan	Australian Rivers Institute, Griffith University. Produced for The Caring for Our Country (CfoC) Initiative; In: Managed by the Northern Gulf Natural Resource Management Group and Land & Water Australia 91 pp 2009 Queensland Australia

James Cook University

PGRA	Bazaka K; Jacob M V <i>et al</i>	Fabrication and characterization of RF plasma polymerized thin films from 3,7-dimethyl-1,6-octadien-3-ol for electronic and biomaterial applications	Advanced Materials Research 123-125 323-326 2010
PGRA	Bazaka K; Jacob M V; Truong V K; Wang F; Pushpamali W A A; Wang J Y; Ellis A V Berndt C C; Crawford R J; Ivanova E P	Plasma-enhanced synthesis of bioactive polymeric coatings from monoterpene alcohols: a combined experimental and theoretical study	Biomacromolecules 11 2016-2026 2010
PGRA	Bazaka K; Jacob M V <i>et al</i>	Effect of plasma-enhanced chemical vapour deposition on the retention of antibacterial activity of terpinen-4-ol	Biomacromolecules 11 2016-2026 2010
PGRA	Bazaka K; Jacob M V	Effect of iodine doping on surface and optical properties of polyterpenol thin films	Mat Sci Forum 654-656 1764-1767 2010
PGRA	Bazaka K; Jacob M V <i>et al</i>	A study of a retention of antimicrobial activity by plasma polymerized terpinen-4-ol thin films	Mat Sci Forum 654-656 2261-2264 2010
PGRA	Bazaka K; Jacob M V	Post-deposition ageing reactions of plasma derived polyterpenol thin films	Polym Degrad Stabil 95 1123-1128 2010
PGRA	Jacob M V; Bazaka K; Weis M; Taguchi D; Manaka T; Iwamoto M	Fabrication and characterization of polyterpenol as an insulating layer and incorporated organic field effect transistor	Thin Solid Films 518 6123-6129 2010

La Trobe University

07/034	(Cosgrove R); Ferrier A	Journeys into the rainforest. Long-term change and continuity in Aboriginal tropical rainforest occupation on the Evelyn Tableland in far north Queensland	PhD thesis 2010
07/034	Cosgrove R	Coping with noxious nuts	Nature Australia 28 6 2005
07/050	Frankel D	A different Chalcolithic: a central Cypriot scene	In: D L Bolger and L Maguire (eds), The Development of Pre-state Communities in the Ancient Near East: Studies in Honour of Edgar Peltenburg 38-45 2010 Oxbow Oxford

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
07/136P	Sowada K N; Jacobsen G; Bertuch F; Jenkinson A	The Date of a Mummified Head in the Nicholson Museum, Sydney	Bulletin of the Australian Centre for Egyptology 21 115-122 2010
02/056	Yonge D	Fluvial evolution on the Lower Macquarie riverine plain, Central Western New South Wales	MSc Thesis 2010
PGRA; 01/068	Ralph T J; Hesse P P	Downstream hydro-geomorphic changes along the Macquarie River, south-eastern Australia, leading to channel breakdown and floodplain wetlands	Geomorphology 118 48-64 2010

The University of Melbourne

09/0691	Best S P; Wichta P; Edwards A J	Single-crystal neutron diffraction and oriented single-crystal Raman spectroscopy of zinc and cadmium cyanide	9th AINSE/ANBUG Neutron Scattering Symposium 47 Lucas Heights December 2010
09/041	(Camakaris J); Paterson B M; Karas J A; Scanlon D B; White J M; Donnelly P S	Versatile new bis(thiosemicarbazone) bifunctional chelators: synthesis, conjugation to bombesin(7-14)-NH ₂ , and copper-64 radiolabeling	Inorg Chem 49 1884-1893 2010
09/041	(Camakaris J); Lim S; Paterson B M; Caragounis A; Peach J M; Dilworth J R; Donnelly P S <i>et al</i>	Copper and zinc bis(thiosemicarbazone) complexes with a fluorescent tag: synthesis, radiolabelling with copper-64, cell uptake and fluorescence studies	J Biol Chem 15 225-235 2010
09/041	(Camakaris J); Lim S; Paterson B M; Fodero-Tavoletti M T; O'Keefe G J; Cappai R; Barnham K J; Villemagne V L; Donnelly P S	A copper radiopharmaceutical for diagnostic imaging of Alzheimer's disease: a bis(thiosemicarbazone) copper(II) complex that binds to amyloid-beta plaques	Chem Commun 46 5437-5439 2010
09/041	Fodero-Tavoletti M T; Villemagne V L; Paterson B M; White A R; Li Q X; Camakaris J; O'Keefe G J; Cappai R; Barnham K J; Donnelly P S	Bis(thiosemicarbazone) Cu-64 complexes for positron emission tomography imaging of Alzheimer's Disease	J Alz Dis 20 49-55 2010
08/012; 09/129	Drisko G L; Zelcer A; Luca V, Caruso R A; Soler-Illia G J D A	One-pot synthesis of hierarchically structured ceramic monoliths with adjustable porosity	Chem Mater 22 4379-4385 2010
08/012; 09/129	Drisko G L; Chee Kimling M; Scales N; Ide A; Sizgek E; Caruso R A; Luca V	One-pot preparation and uranyl adsorption properties of hierarchically porous zirconium titanium oxide beads using phase separation processes to vary macropore morphology	Langmuir 26 17581-17588 2010
08/012; 09/129	Drisko G L; Imperia P; de los Reyes M; Luca V; Caruso R A	Size matters: incorporation of poly(acrylic acid) and small molecules into hierarchically porous metal oxides prepared with and without templates	Langmuir 26 14203-14209 2010
09/043	Curtain C C; Ryan T; Mulhern T; Barnham K; Kirby N; Pham C L L	Shedding light on neurodegeneration; SAS and misfolded proteins	9th AINSE/ANBUG Neutron Scattering Symposium 15 December 2010 978-0-9807455-0-1
10/1139	Fernandez D I; Le Brun A P; Lee T-H; Bansal P; Aguilar M-I; James M; Separovic F	Neutron reflectometry and dual polarisation interferometry studies of the antimicrobial peptide maculatin 1.1 in supported lipid bilayers	9th AINSE/ANBUG Neutron Scattering Symposium 58 December 2010 978-0-9807455-0-1

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
09/043	Rekas A; Knott R B; Sokolova A; Curtain C C; Pham C L L <i>et al</i>	The structure of dopamine induced alpha-synuclein oligomers	Eur Biophys J Biophys 39 1407-1419 2010
ISIS	Finlayson T R; Davidson C J; Fitzpatrick M E; Griffiths J R; Oliver E C; Wang Q G	Stresses borne by inclusions in a model metal-matrix composite under load	19th AIP National Congress of Physics 91 Melbourne December 2010
06/069; 07/089P	(Gleadow A; Kohn B); Kohlmann F	Insights into the nanoscale formation of fission tracks in solids and a low-temperature thermochronology study of the Archaean Slave Province, Northwest Territories, Canada	PhD Thesis 2010
03/059P	Lau E W; Drummond K J; Ware R E; Drummond E; Ryan G; Hicks R <i>et al</i>	Comparative PET study using F-18 FET and F-18 FDG for the evaluation of patients with suspected brain tumour	J Clin Neurosci 17 43-49 2010
07/089P	Holt K; Wallace C; Neall V; Kohn B; Lowe D	Quaternary tephra marker beds and their potential for palaeoenvironmental reconstruction on Chatham Island, east of New Zealand, southwest Pacific Ocean	J Quaternary Sci DOI: 10.1002/jqs.1397 2010
07/089P	Bermudez M; Kohn B P; van der Beek P; Bernet M; O'Sullivan P B; Shagam R	Spatial and temporal patterns of exhumation across the Venezuelan Andes: implications for Cenozoic Caribbean geodynamics	Tectonics 29 21 2010
09/073	(Kolev S); Lomonte C	Environmental fate and phytoremediation of mercury in biosolids	PhD Thesis 2010
09/137	Gunn N J; Smith E D; Mulhern T D	Using small-angle x-ray scattering to gain insight in the catalytic regulation of signaling enzymes in health and disease	9th AINSE/ANBUG Neutron Scattering Symposium 22 December 2010 978-0-9807455-0-1
FEL	White C E; Provis J L; Riley D P; Kearley G J; van Deventer J S J	What is the structure of kaolinite? Reconciling theory and experiment	J Phys Chem B 113 6756-6765 2009
FEL	Styles M J; Riley D P; Rowles M R; Madsen I C; McGregor K; Scarlett N V Y; Urban A	An environmental cell for studying molten salt processes <i>in situ</i> using energy dispersive x-ray diffraction	9th AINSE/ANBUG Neutron Scattering Symposium 81 December 2010 978-0-9807455-0-1
04/132P	(Sagona A); Birkett-Rees J	Archaeological landscapes of Transcaucasia: environment, power and place in Tbilisi and Mtskheta	PhD Thesis 2009
08/079; 10/107	Monsant A C; Wang Y D; Tang C X	Nitrate nutrition enhances zinc hyperaccumulation in <i>Noccaea caerulea</i> (Prayon)	Plant Soil 336 391-404 2010
07/164; 08/076	Zhou M; Hanley T; Caruso R	Small angle x-ray scattering study of TiO ₂ mesoporous structures in highly concentrated surfactant/non-aqueous solvent systems	9th AINSE/ANBUG Neutron Scattering Symposium 98 Lucas Heights December 2010 978-0-9807455-0-1

Monash University

06/018	Nguyen T-H; Hanley T; Porter C J H; Larson I; Boyd B J	Phytantriol and glyceryl monooleate cubic liquid crystalline phases as sustained-release oral drug delivery systems for poorly water soluble drugs I. Phase behaviour in physiologically relevant media	J Pharm Pharmacol 62 844-855 2010
06/018	Nguyen T-H; Hanley T; Larson I; Porter C J H; Boyd B J	Phytantriol and glyceryl monooleate cubic liquid crystalline phases as sustained-release oral drug delivery systems for poorly water soluble drugs II. <i>In vivo</i> evaluation	J Pharm Pharmacol 62 856-865 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
08/007; ISIS	Dong Y D; Tilley A J; Larson I; Lawrence M J; Amenitsch H; Hanley T; Boyd B J <i>et al</i>	Nonequilibrium effects in self-assembled mesophase materials: unexpected supercooling effects for cubosomes and hexosomes	Langmuir 26 9000-9010 2010
09/053	Cartwright I; Weaver T R; Cendon D I; Swane I	Environmental isotopes as indicators of aquitard effectiveness, Murray Basin, Australia	11th Water-Rock Interaction 67-70 2010 London
09/053	Cartwright I; Weaver T; Cendon D I; Swane I	Environmental isotopes as indicators of aquitard effectiveness and inter-aquifer mixing, Wimmera Region, Murray Basin, Southeast Australia	Chem Geol 277 214-226 2010
PGRA	Chesman A S R; Turner D R; Izgorodina E I; Deacon G B; Batten S R	Theoretical and experimental insights into the mechanism of the nucleophilic addition of water and methanol to dicyanonitrosomethanide	J Phys Chem B 114 16517-16527 2010
PGRA	Chesman A S R; Turner D R; Izgorodina E I; Edwards A J; Deacon G B; Batten S R	A structural and computational study of the formation of the carbamoylcyanonitrosomethanide anion	9th AINSE/ANBUG Neutron Scattering Symposium 19 December 2010 978-0-9807455-0-1
PGRA	Cook E	A record of late Quaternary environments at lunette-lakes Bolac and Turangmorohe, Western Victoria, Australia, based on pollen and a range of non-pollen palynomorphs	Rev Palaeobot Palyno 153 185-224 2009
09/120	Fong W-K; Hanley T; Boyd B	Light responsive nanostructured matrices for pulsatile drug delivery	9th AINSE/ANBUG Neutron Scattering Symposium 17 December 2010
PGRA	Fong W-K; Hanley T; Thierry B; Kirby N; Boyd B J	Plasmonic nanorods provide reversible control over nanostructure of self assembled drug delivery materials	Langmuir 26 6136-6139 2010
PGRA	Fong W-K; Hanley T L; Thierry B; Kirby N; Boyd B J	Lyotropic liquid crystals responsive to light stimuli	Australian Colloid & Surface Science Student Conference 15 2010
PGRA	Fong W-K; Hanley T L; Thierry B; Kirby N; Boyd B J	Using gold nanorods as a switch for photo-responsive lyotropic liquid crystal drug delivery systems	FIP PSWC/AAPS Annual Meeting & Exposition and the PSWC 2010 Congress for Students and Postdoctoral Fellows 6118 2010
PGRA	Fong W-K; Hanley T L; Boyd B J	Light responsive nanostructured matrices for pulsatile drug delivery	4th Annual Meeting of the Australian Chapter of the Controlled Release Society 43 2010
PGRA	Healy J	Residual macromolecular orientation after injection moulding	PhD Thesis 2009
01/084	Kershaw A P; McKenzie G M; Brown J; Roberts R G; van der Kaars S	Beneath the peat: a refined pollen record from an interstadial at Caledonia Fen, highland eastern Victoria, Australia	In: S G Haberle, J Stevenson, M Prebble (eds) Altered Ecologies: Fire, Climate and Human Influence on Terrestrial Landscapes, Terra Australis 32 2010 978-1-9216668-0-3
09/007	McNiven I J; Bell D	Fishers and farmers: historicising the Gunditjmarra freshwater fishery, western Victoria	La Trobe Journal 85 83-105 2010 1441-3760
PGRA	Pardowska A M; Price J W H; Finlayson T R; Ibrahim R	Evaluation of residual stress measurements before and after post-weld heat treatment in the weld repairs	J Phys Conf Ser 251 012050 2010
PGRA	Pardowska A M; Price J W H; Kerezsi B; Dayawansa P; Zhao X L	Stress relieving and its effect on life of welded tubular joints	Engineering Failure Analysis 17(1) 320-327 2010
PGRA	Paradowska A M	Investigation of residual stress in welds: using neutron and synchrotron diffraction	In: LAP Lambert Academic Publishing AG & CO.KG 2010 978-3-8383-6944-0
PGRA	Paradowska A M; Price J; Finlayson T; Lienert U; Ibrahim R	Comparison of neutron and synchrotron diffraction measurements of residual stress in bead-on-plate weldments	J Press Vess-T ASME 132 011502 1-8 2010

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PGRA	Paradowska A M; Price J W H; Finlayson T R; Rogge R B; <i>et al</i>	Comparison of neutron diffraction residual stress measurements of steel butt welds with current fitness-for-purpose assessments	J Press Vess-T ASME 132 051503 1-7 2010
07/133; 08/059	Singh R K; Gupta R K; Koch C C	Synthesis challenges and extraordinary resistance to environmental degradation of nanocrystalline vis-à-vis microcrystalline Fe-Cr alloys	Philosophical Magazine 90 3233 2010
07/133; 08/059	(Singh R); Gupta R K	Synthesis and corrosion behaviour of nanocrystalline Fe-Cr alloys, Mo	PhD Thesis 2010
07/133; 08/059	Gupta R K; Singh R; Koch C C	Fabrication and oxidation resistance of nanocrystalline Fe-Cr alloys	J Mater Sci 45 4884-4888 2010
RF	Turner D R; Edwards A J	Structural investigation of an expanded urea clathrate material by Laue neutron diffraction	9th AINSE/ANBUG Neutron Scattering Symposium 84 December 2010
06/183	Beaufort L; van der Kaars S; Bassinot F C; Moron V	Past dynamics of the Australian monsoon: precession, phase and links to the global monsoon concept	Clim Past 6 695-706 2010
00/156	van der Kaars S; Tapper N; Cook E J	Observed relationships between El Niño-Southern oscillation, rainfall variability and vegetation and fire history on Halmahera, Maluku, Indonesia	Global Change Biol 16 1705-1714 2010

Murdoch University

09/115P	Minakshi M; Blackford M G; Thorogood G J; Issa T B	The effect of B ₄ C addition to MnO ₂ in a cathode material of an aqueous secondary system	Electrochim Acta 55 1028-1033 2010
10/053	Minakshi M;	Lithium intercalation into amorphous FePO ₄ cathode in aqueous solutions	Electrochim Acta 55 9174-9178 2010
10/053	Minakshi M; Pandey A; Blackford M; Ionescu M	Effect of TiS ₂ additive on LiMnPO ₄ cathode in aqueous solutions	Energy & Fuels 24 6193-6197 2010
10/053	Pandey A; Minakshi M; Blackford M; Ionescu M	Zn-LiMn ₂ O ₄ aqueous electrochemical energy storage system	International Symposium on Advances in Electrochem Sci and Technol Abstracts B-001 December 2010 Madras, India
10/053	Pandey A; Minakshi M; Blackford M; Ionescu M	Delithiation of TiS ₂ - added olivine type LiMnPO ₄ in aqueous solutions	International Symposium on Advances in Electrochem Sci and Technol Abstracts B-002 December 2010 Madras, India
09/115P	Minakshi M; Ionescu M	Anodic behavior of zinc in Zn-MnO ₂ battery using ERDA technique	Int J Hydrogen Energy 35 7618-7622 2010
09/115P	Minakshi M; Blackford M G	Electrochemical characteristics of B ₄ C or BN added MnO ₂ cathode material for alkaline batteries	Mater Chem Phys 123 700-705 2010
10/053	Minakshi M; Singh P; Sharma N; Blackford M; Ionescu M	Lithium extraction-insertion from/into LiCoPO ₄ in aqueous batteries	Industrial & Eng Chem Res 1492 2010

The University of Newcastle

ISIS	Wakeham D; Niga P; Rutland M; Warr G G; Atkin R	Non-ionic surfactant adsorption at the ethylammonium nitrate surface: a neutron reflectivity and vibrational sum frequency spectroscopy study	Langmuir 26 8313-8318 2010
98/147R	Colhoun E A; Kiernan K W; McConnell A; Quilty P G; Fink D; Murray-Wallace C; Whitehead J	Late Pliocene age of glacial deposits at Heidemann Valley, East Antarctica: evidence for the last major glaciation in the Vestfold Hills	Antarct Sci 22 53-64 2010

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10/066	Oskierski H C; Bailey J G; Kennedy E M; Dlugogorski B Z	Analogues to mineral sequestration of CO ₂ : sources of carbon in magnesite of Attunga Magnesite Quarry, NSW, Australia, a stable isotope study	New England Orogen 259-265 November 2010 Armidale, Australia 978 1 921597 24 4
10/066	Oskierski H C; Bailey J B; Frisia S; Kennedy E M; Dlugogorski B Z	Natural analogues to mineral sequestration of CO ₂ : petrographic constraints on the formation of serpentinite hosted magnesite veins	ACEME 10 3rd International Conference on Accelerated Carbonation for Environmental and Materials Engineering 121-130 December 2010 978-952-12-2505-5
08/091	Sim A K; Erskine W D; Drysdale R	Application of sediment studies to the management and planning of water resources in the Sydney region	Sediment Dynamics for a Changing Future. Proceedings of the ICCE Symposium held at The Warsaw University of Life Sciences SGGW 337 Warsaw June 2010
03/047	Goodwin I D; Harvey N	Subtropical sea-level history from coral microatolls in the Southern Cook Islands, since 300 AD	Mar Geol 253 14–25 2008
ISIS	Styles M D; Riley D P; Madsen I C; Kisi E H	Parametric Rietveld refinement applied to <i>in situ</i> diffraction studies	Proceedings of the 34th Australian and New Zealand Condensed Matter Physics Conference 79 2010
10/1140	Zhang J F; Kisi E H; Kirstein O	Quantitative texture measurement with fixed wavelength neutron diffractometer	9th AINSE/ANBUG Neutron Scattering Symposium 97 December 2010 978-0-9807455-0-1
10/01140	Kisi E H; Zhang J F; Howard C J; Kirstein O; Riley D P	Can neutrons determine elastic constants better than ultrasound?	9th AINSE/ANBUG Neutron Scattering Symposium 37 December 2010 978-0-9807455-0-1
09/088	McDonald J; Drysdale R	Reconstruction of drought history in eastern Australia using speleothems	Report to Sydney Catchment Authority 2010
PGRA	Niga P; Wakeham D; Nelson A; Warr G G; Rutland M; Atkin R	Structure of the ethylammonium nitrate surface: an x-ray reflectivity and vibrational sum frequency spectroscopy study	Langmuir 26 8282–8288 2010

The University of New England

09/001	Smedley G; Baker R	Determining Holocene sea-level changes on an exposed coastline: a case study of the Coffs Harbour area mid-north NSW	Australasian Quaternary Association Meeting 21- 22 North Stradbroke Island July 2010
09/001	Baker R; Wilkes K	Boulder assemblages on the New South Wales North Coast, Australia: sedimentology, age and origin	Australasian Quaternary Association Meeting 24 North Stradbroke Island July 2010
09/001	Wright S A; Baker R G V	Mid to late Holocene sea-level change in the northern Whitsundays, Queensland	Australasian Quaternary Association Meeting 15 North Stradbroke Island July 2010
09/001	Baker R G V; Wright S A	Fluctuating southern hemisphere Holocene relative sea-level model: new sites, possible errors, sources and mechanisms	Australasian Quaternary Association Meeting 22 North Stradbroke Island July 2010

The University of New South Wales

09/063	Andersen M S; McCallum A M; Meredith K; Acworth R I	Investigation of recharge pathways and recharge rates using environmental isotopes (² H, ¹⁸ O, ¹⁴ C and ³ H) in the Maules Creek Catchment, NSW, Australia	XXXVIII - IAH Congress 1625-1929 September 2010
03/178	(Box G); Hallal T	Size-resolved properties of atmospheric aerosols in Sydney and regional NSW	PhD Thesis 2010
08/006; 09/057	(Box M); Radhi M;	Physical and chemical properties of Australian continental aerosols	PhD Thesis 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
08/006	Radhi M; Box M A ; Box G P; Mitchell RM; Cohen D D; Stelcer E <i>et al</i>	Optical, physical and chemical characteristics of Australian continental aerosols: results from a field experiment	Atmos Chem Phys 10 5925-5942 2010
09/057	Radhi M; Box M A; Box G P; Mitchell R M; Cohen D D; Stelcer E; Keywood M D	Size-resolved mass and chemical properties of dust aerosols from Australia's Lake Eyre Basin	Atmos Environ 44 3519-3528 2010
09/057	Radhi M; Box M A; Box G P; Cohen D D	Size-resolved chemical composition of the September 2009 Sydney dust storm	Air Quality and Climate Change 44 25-30 2010
09/057	Box M; Radhi M; Box G P	The great Sydney dust event: size-resolved chemical composition and comparison	17th National Conference of AMOS, IOP Conf. Series: Earth and Environmental Science 11 2010
10/0942	Wang J L; Campbell S J; Studer A J; Kennedy S J; Dou S X	Influence of applied magnetic field on magnetovolume effects – re-entrant ferromagnet $\text{Pr}_{0.5}\text{Y}_{0.5}\text{Mn}_2\text{Ge}_2$	9th AINSE/ANBUG Neutron Scattering Symposium 7 December 2010 978-0-9807455-0-1
10/0563	Wang J L; Campbell S J; Zeng R; Poh C K; Dou S X; Kennedy S J	Re-entrant ferromagnet $\text{PrMn}_2\text{Ge}_{0.8}\text{Si}_{1.2}$: magnetocaloric effect	J Appl Phys 105(7) 3 2009
PGRA	Ciampi S; Gooding J J	Direct electrochemistry of cytochrome c at modified Si(100) electrodes	Chem Eur J 16 5961-5968 2010
PGRA	Ciampi S; Harper J B; Gooding J J	Wet chemical routes to the assembly of organic monolayers on silicon surfaces via the formation of Si-C bonds: surface preparation, passivation and functionalization	Chem Soc Rev 39 2158-2183 2010
PGRA	Ng A; Ciampi S; Harper J B; Gooding J J	Antifouling behaviour of silicon surfaces modified with self-assembled monolayers containing both ethylene glycol and charged moieties	Surf Sci 604 1388-1394 2010
08/025	Graham I; Nechaev V; Sutherland L; Khin Zaw; Meffre S; Ionescu M	Gem corundum deposits of Primorye, far eastern Russia: origin as xenocrysts from Miocene intraplate basalts	13th Quadrennial IAGOD Symposium 414-415 2010 978-1-921399-35-0
08/025	Voudouris P; Graham I; Melfos V; Khin Zaw; Sutherland L; Giuliani G; Fallick A; Ionescu M	Gem corundum deposits of Greece: diversity, chemistry and origins	13th Quadrennial IAGOD Symposium 429-430 2010 978-1-921399-35-0
09/0667; 10/134	Hutchison W D; Nishimura K	Low temperature nuclear orientation studies of the magnetic structures of RNiAl_4 in applied magnetic fields	9th AINSE/ANBUG Neutron Scattering Symposium 64 December 2010 978-0-9807455-0-1
09/0610	Lee Y T; Tsai P J; Lim K L; Peterson V K; Yang B; Chan S L I	Neutron diffraction study on the modification of multi-walled carbon nanotubes by microwave irradiation for hydrogen storage	9th AINSE/ANBUG Neutron Scattering Symposium 50 December 2010 978-0-9807455-0-1
06/243; 06/245	(Li S); Tay Y Y	Studies of the role of defects on the characteristic emission properties of zinc oxides	PhD Thesis 2010
09/118	(Li S); Assadi M H	Development of diluted magnetic semiconductors for spintronic applications	PhD Thesis 2010
06/245; 08/152	Photongkam P; Zhang Y B; Assadi M H N; Li S; Yu D; Ionescu M; Pan A V	Enhancement of Co substitution induced by Eu codoping in ZnO-based diluted magnetic semiconducting thin films	J Appl Phys 107 033909-033912 2010
09/102	Assadi M; Zhang Y B; Li S	Predominant role of defects on magnetic interactions in codoped ZnO:Co	J Phys-Condens Mat 22 296004/1-7 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
09/102	Assadi M; Zhang Y B; Li S	Hydrogen multicentre bonds mediated magnetism in Co doped ZnO	J Phys-Condens Mat 22 156001/1 – 156001/4 2010
10/1161	Tsai P-H; Donelson R; Tan T T; Avdeev M; Yu D H; Strassle T; Li S	Oxygen level dependent lattice dynamics of $\text{Na}_{0.73}\text{CoO}_{2-d}$	J Phys Chem C 114 21848 2010
09/0367	Mulders A	X-ray and neutron diffraction studies of ordering phenomena in multiferroic materials	9th AINSE/ANBUG Neutron Scattering Symposium 6 December 2010 978-0-9807455-0-1
PGRA	Simons H; Daniels J E; Jo W; Studer A J; Avdeev M; Hoffman M	Electric-field-induced strain mechanisms in lead-free 94% $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ -6% BaTiO_3	9th AINSE/ANBUG Neutron Scattering Symposium 36 December 2010 978-0-9807455-0-1
06/165	Stewart G A	Characterisation of the crystal field interaction in rare earth intermetallics using Mössbauer spectroscopy	J Phys: Conf Series 217 12071 2010
07/139	Salama H A; Stewart G A	Exchange-induced Tm magnetism in multiferroic h-TmMnO ₃	33rd Annual Condensed Matter & Materials Meeting WP27 Wagga Wagga February 2009
08/060	Salama H A; Stewart G A; Hutchison W D; Nishimura K; Scott D R; O'Neill H S	A Tm-169-Mössbauer spectroscopy investigation of orthorhombic phase o-TmMnO ₃	Solid State Commun 150 289-291 2010 0038-1098
08/060	(Stewart G A); Salama H A	A Mössbauer spectroscopy investigation of the manganites of thulium and ytterbium	PhD Thesis 2010
07/139	(Stewart G A); Saensunon B	A study of the crystal field interaction for two rare earth intermetallic series	PhD Thesis 2009
10/145	(Taylor M); Schaffer S	Coriolis deflection of estuarine outflow: implications for coastal food webs	Honours Thesis 2010
10/0942	Wang J L; Campbell S J; Kennedy S J; Dou S X; Studer A J; Wu G H	Magnetic structure and phase transition of TbNi_2Mn	9th AINSE/ANBUG Neutron Scattering Symposium 85 December 2010 978-0-9807455-0-1

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PGRA	Lilly K; Fink D; Fabel D; Lambeck K	Pleistocene dynamics of the interior East Antarctic ice sheet	Geology 38 703-706 2010
08/107P	Summerhayes G R; Leavesley M; Fairbairn A	Impact of human colonisation on the landscape – a view from the Western Pacific	Pacific Science 725-745 2009
08/107P	Summerhayes G R	Lapita Interaction – an update	International Symposium on Austronesian Studies, Taitong: National Museum of Prehistory 11-40 2010
08/107P	Summerhayes G R	The emergence of Lapita in the Bismarck Archipelago Tamuarawai (EQS): an early Lapita site on Emirau, New Ireland, PNG	Lapita: Ancêtres Océaniens, Paris: Musee du Quai Branly 92-101 2010
08/107P	Summerhayes G R; Matisoo-Smith L; Mandui H; Allen J; Specht J; Hogg N; S McPherson	Tamuarawai (EQS): an early Lapita site on Emirau, New Ireland, PNG	JPacific Archaeol 1 62-75 2010

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PGRA	Chen X; Middelberg A; He L	Bioactivities of human galectins studied by a lipid membrane biosensor	40th Annual Australasian Chemical and Process Engineering Conference 293 September 2010 Adelaide
08/094; 09/083	Morellia G; Gasparona M; Hua W-P; Fierro D	Human impact recorded in sediment cores from Moreton Bay, southeast Queensland, Australia	Geochim Cosmochim Ac 73 903 2010
FEL	Chen X; Wang H; Middelberg A P J; He L Z	Polymer modified human galectin-2 for enhanced therapeutic application	9th AINSE/ANBUG Neutron Scattering Symposium 61 December 2010 978-0-9807455-0-1
FEL	Dimitrijević-Dwyer M; Nelson A; James M; Middelberg A P J; He L Z	Controlling interfacial properties of thin films using rationally designed biosurfactants	9th AINSE/ANBUG Neutron Scattering Symposium 60 December 2010 978-0-9807455-0-1
FEL	Onaizi S H; He L-Z; Middelberg A P J	The construction, fouling and enzymatic cleaning of a textile dye surface	J Colloid Interface Sci 351 203-209 2010
FEL	Ding Y; Chuan Y-P; He L-Z; Middelberg A P J	Modelling the competition between aggregation and self-assembly during virus-like particle processing	Biotechnology Bioengineering 107 550-560 2010
06/231	He L Z; Wang H; Garamus V M; Hanley T; Lensch M; Gabius H J; Fee C J; Middelberg A	Analysis of monoPEGylated human galectin-2 by small-angle x-ray and neutron scattering: concentration dependence of PEG conformation in the conjugate	Biomacromolecules 11 3504-3510 2010
FEL	Ding Y; He L Z; Middelberg A P J	Dispersion-enhanced chromatography refolding of denatured protein	Chem Eng Sci 63 4333-4341 2008
FEL	Onaizi S A; He L Z; Middelberg A P J	Rapid screening of surfactant and biosurfactant surface cleaning performance	Colloid Surface B 72 68-74 2009
07/079	Kahn J G	Spatio-temporal analysis of 'Oro cult marae in the 'Opunohu Valley, Mo'orea, Society Islands	Archaeology in Oceania 45 103-110 2010
07/175; 09/047	Lovelock C E; Sorrell B; Hancock N; Hua Q; Swales A	Mangrove forest and soil development on a rapidly accreting shore in New Zealand	Ecosystems 13 437-451 2010
07/104	Dunne N; Ormsby R; McNally T; Mitchell C A; Martin D; <i>et al</i>	Nanocomposite bone cements for orthopaedic applications	Biomechanics 43 S53 2010
07/104	Musumeci A W; Mortimer G M; Butler M K; Martin D J <i>et al</i>	Fluorescent layered double hydroxide nanoparticles for biological studies	Applied Clay Science 48 271-279 2010
07/104	Musumeci A W; Xu Z P; Smith S V; Minchin R F; Martin D J	Layered double hydroxide nanoparticles incorporating terbium: applicability as a fluorescent probe and morphology modifier	J Nanopart Res 12 111-120 2010
08/124	Marx S K; Kamber B S; McGowan H A; Zawadzki A	Atmospheric pollutants in alpine peat bogs record a detailed chronology of industrial and agricultural development on the Australian continent	Environ Pollut 158 1615-1628 2010
08/124	McGowan H A; Marx S K; Soderholm J; Denholm J	Evidence of solar and tropical-ocean forcing of hydroclimate in southeastern Australia for the past 6500 years	Geophys Res Lett 37 L10705 2010
09/004; 10/067	(Moss P); Petherick L	Late Quaternary environments of the subtropics of eastern Australia	PhD Thesis 2010
PGRA	Musumeci A W	Tailored nanoparticles for nanotoxicological investigations	PhD Thesis 2010

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PGRA	Musumeci A W; Gahan L R; Rajh T; Martin D J; Smith S V	Radiolabelling of TiO ₂ nanoparticle libraries for toxicological investigations	Materials Research Society Fall Meeting DOI: 10.1557/PROC-1209-YY04-01 November 2009 Boston, USA
PGRA	Musumeci A W; Schiller T L; Xu Z P; Minchin R F; Martin D J; Smith S S	Synthesis and characterisation of dual radiolabelled layered double hydroxide nanoparticles for use in <i>in vitro</i> and <i>in vivo</i> nanotoxicology studies	J Phys Chem C 114 734-740 2010
PGRA	Musumeci A W	Deep Raman probe from semiconducting nanoparticles	Chemistry in Australia 76 8 2010
PGRA	Musumeci A W; Broadhurst G M; Butler M K; Xu Z P; Minchin R F; Martin D J	Layered double hydroxides for biological studies	Applied Clay Science 48 271-279 2010
PGRA	Musumeci A W; Schiller T M; Xu Z P; Smith S V; Minchin R F; Martin D J	Kinetic stability and dissolution of dual radiolabelled layered double hydroxide nanoparticles	J Phys Chem C 114 734-740 2010
PGRA	Deng Z J; Broadhurst G M; Schiller T; Musumeci A W; Martin D J; Minchin R F	Differential plasma protein binding to metal oxide nanoparticle	Nanotechnology 20 455101-455110 2009
10/117	Narayan R; Pandolfi J	Benthic foraminiferal assemblages as Holocene to recent environmental indicators in Moreton Bay, South-East Queensland, Australia	International Symposium of Foraminifera, Rheinische Friedrich-Wilhelms-Universität 146 Bonn, Germany September 2010
PGRA	Smith A R G; Cavaye H; Shaw P E; Darwish T A; James M; Lo S-C; Gentle I R; Burn P L	Multilayer films for OLEDs studied by neutron reflectometry	9th AINSE/ANBUG Neutron Scattering Symposium 78 December 2010 978-0-9807455-0-1
PGRA	Smith A R G; Ruggles J L; Yu A M; Gentle I R	Multilayer nanostructured porphyrin arrays constructed by layer-by-layer self-assembly	Langmuir 25 9873-9878 2009
06/181, 08/063	(Ulm S); Wright D	The archaeology of community emergence and development on Mabuyag in the Western Torres Strait	PhD Thesis 2010
06/181	Rosendahl D; Ulm S; Jacobsen G; Memmott P	Insular ideas: an archaeology of isolation in the Wellesley Islands?	Australian Archaeological Association Annual Conference Abstracts. S K May, M Travers and M Berry (eds) 81 2010 Canberra: Australian National University
PGRA	Witt T; Gilbert R; Gilbert E	The connection between molecular structure and granular structure of starch	9th AINSE/ANBUG Neutron Scattering Symposium 85 December 2010 978-0-9807455-0-1
PGRA	Witt T; Gidley M J; Gilbert R G	Starch digestion mechanistic information from the time evolution of molecular size distributions	J Agr Food Chem 58 8444-8452 2010
09/033P	Yu K; Hua Q; Zhao J-X; Hodge E; Fink D; Barbetti M	Holocene marine ¹⁴ C reservoir age variability: evidence from ²³⁰ Th-dated corals in the South China Sea	Paleoceanography 25 PA3205-3220 2010

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09/069	Friend A J; Ayoko G A; Stelcer E; Cohen D	Source apportionment of air pollutants in South Brisbane	Application of Advanced Chemometric Techniques 41 December 2010 Hobart Australia
PGRA	Sloss C R; Jones B G; Murray-Wallace C V	Recent morphological change and recent sedimentation in Lake Illawarra	Wetlands (Australia) 21 73-83 2004 0725-0312

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Sloss C R; Jones B G; Murray-Wallace C V	Litho- and chrono-stratigraphy of holocene sedimentary successions preserved in Lake Illawarra, NSW south coast, Australia	Wetlands (Australia) 21 61-72 2004 0725-0312
PGRA	Spratt H J; Rintoul L; Frost R L; Martens W N	Crystal structural investigation of jarosite solid solutions	9th AINSE/ANBUG Neutron Scattering Symposium 80 December 2010 978-0-9807455-0-1

RMIT University

PGRA	Bilus Abaffy N	Design and synthesis of advanced broadband optical coatings	PhD Thesis 2010
07/070P; 08/124P	(Holland A); Sriram S; Bhaskaran M; Mitchell A	Piezoelectric thin film deposition: novel selfassembled island structures and low temperature processes on silicon	In: Piezoelectric Ceramics, Microplatforms Research Group, RMIT University Australia 1-22 2010 978-953-307-122-0
08/033	Bhaskaran M; Sriram S; Holland A	Interfacial resistive properties of nickel silicide thin films to doped silicon	J Electrochem Soc 157 H842-H846 2010
PGRA	Kent B; Lenné T; Garvey C J; Koster K L; Hunt T; Bryant G	Towards molecular mechanism for the protective effects of sugars on membrane damage during dehydration	9th AINSE/ANBUG Neutron Scattering Symposium 4 December 2010 978-0-9807455-0-1
PGRA	Kent B; Garvey C J; Lenne T; Hauss T; Bryant G	The effects of sugars on lipid membrane phase behaviour and their role as protectants during freezing and dehydration	19th Australian Institute of Physics Congress 78 December 2010
PGRA; 06/023	Kent B; Garvey C J; Lenné T; Porcar L; Garamus V M; Bryant G	Measurement of glucose exclusion from the fully hydrated DOPE inverse hexagonal phase	Soft Matter 6 1197-1202 2010
09/116P; 10/124	Murugaraj P; Mainwaring D; Khelil N A; Peng J L; Siegele R; Sawant P	The improved electromechanical sensitivity of polymer thin films containing carbon clusters produced <i>in situ</i> by irradiation with metal ions	Carbon 48 4230-4237 2010 0008-6223
10/085	Reeves J M	The Barwon Estuary – see change?	AQUA meeting, North Stradbroke Island 9-10 July 2010
06/164P	Sabri Y M; Ippolito S J; Tardio J; Atanacio A J; Sood D K; Bhargava S K	Mercury diffusion in gold and silver thin film electrodes on quartz crystal microbalance sensors	Sensor Actuat B-Chem 137 246-252 2009
08/124P	Sriram S; Bhaskaran M; Kostovski G; Mitchell D R G; Stoddart PR; Austin MW; Mitchell A	Synthesis of self-assembled island-structured complex oxide dielectric films	J Phys Chem C 113 16610-16614 2009

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05/188	Mistry M; Choudhury N R; Dutta N K; Knott R	Inorganic modification of block copolymer for medium temperature proton exchange membrane application	J Membrane Sci 351 168 2010
05/188	Mistry M K; Choudhury N R; Dutta N K; Knott R	Nanostructure evolution in high-temperature perfluorosulfonic acid ionomer membrane by small-angle x-ray scattering	Langmuir 26 19073 2010
10/01118	Otsuki A; Garvey C	<i>In situ</i> observation of pearl chain formations of dielectric particles under an electric field by small-angle neutron scattering	9th AINSE/ANBUG Neutron Scattering Symposium 69 December 2010 978-0-9807455-0-1

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05/018; 06/019; 06/020; 06/021	Boyd W E; Chang N	Integrating social and environmental change in prehistory: a discussion of the role of landscape as a heuristic in defining prehistoric possibilities in Thailand	Altered Ecologies - Fire, climate and human influence on terrestrial landscapes. Canberra: ANU E Press 273-297 2010
08/010	Isaacson L S; Burton E D; Bush R T; Mitchell, D R G; Johnston S G <i>et al</i>	Iron(III) accumulations in inland saline waterways, Hunter Valley, Australia: mineralogy, micromorphology and pore-water geochemistry	Appl Geochem 24 1825-1834 2009
08/010	Isaacson L S; Burton E D; Bush R T; Mitchell, D R G; Johnston S G; Sullivan L A	Biominaleralisation of nano-Fe(III) phases in inland waterways	Geochim Cosmochim Acta 73 A571-A571 2009
08/010	Isaacson L; Burton E D; Bush R T; Mitchell D R G; Johnston S G <i>et al</i>	Properties of iron-precipitate accumulations in saline waterways of the Hunter Valley, Australia	Appl Geochem 24 1825-1834 2010
07/045	Eyre B D; Maher D	Structure and function of warm temperate east Australian coastal lagoons: implications for natural and anthropogenic change	In: Kennish, M. and Paerl, H (eds.). Coastal Lagoons: Systems of Natural and Anthropogenic Change. CRC Press 2010
08/131	(Keene A); Cheetham M D	Floodplain terrace geomorphic processes and chronology in south-eastern Australia: implications for late Quaternary river development	PhD thesis 2010
06/092; 08/131	Cheetham M D; Bush R T; Keene A F; Erskine W D	Longitudinal correlation of late Quaternary terrace sequences of Widden Brook, southeastern Australia	Aust J Earth Sci 57 97-109 2010
08/131	Cheetham M D; Bush R T; Keene A F; Erskine W D	Nonsynchronous, episodic incision: evidence of threshold exceedance and complex response as controls of terrace formation	Geomorphology 123 320-329 2010
06/092; 08/131	Cheetham M D; Keene A F; Erskine W D; Bush R T; Fitzsimmons K; Jacobsen G; Fallon S J	Resolving the Holocene alluvial record in south-eastern Australia using luminescence and radiocarbon techniques	J Quaternary Sci 25 1160-1168 2010
10/102	Johnston S G; Keene A F; Bush R T; Burton E D; Sullivan L A	Seawater inundation of Fe-rich coastal lowlands – hydrogeochemical coupling and hysteresis at the tidal fringe	20th Annual V.M. Goldschmidt Conference (Geochemical Society, and European Society for Geochemistry). Geochimica et Cosmochimica Acta 74 A475 2010
10/102	Bush R T; Sullivan L A; Burton E D; Johnston S G; Keene A F; Wong V; Mosely L	Climate change impacts on acid sulfate soil landscapes	20th Annual V.M. Goldschmidt Conference (Geochemical Society, and European Society for Geochemistry). Geochimica et Cosmochimica Acta 74 A132 2010
09/096	Parr J F; Sullivan L A; Chen B; Ye G; Zheng W	Carbon bio-sequestration within the phytoliths of economic bamboo species	Global Change Biol 16 2661–2667 2010
PGRA; 04/150	Parr J F; Taffs K H; Lane C M	A microwave digestion technique for the extraction of fossil diatoms from coastal lake and swamp sediments	J Paleolimn 31 383-390 2004
07/145; 08/147	Logan B; Taffs K H; Cunningham L	Applying paleolimnological techniques in estuaries: a cautionary case study from Moreton Bay, Australia	Mar Freshwater Res 61 1039-1047 2010

Swinbure University

10/133	Shah A B; Triani G; Evans P J; Stoddart P R	Atomic layer deposition on surface-enhanced Raman scattering substrates	10th International Conference on Atomic Layer Deposition 121 Seoul, Korea June 2010
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Project Number	Chief Investigator Coauthors	Title of Publication	Reference
The University of Sydney			
PGRA	Abbey E; Webster J; Jacobsen G; Thomas A; Henderson G; Reimer P <i>et al</i>	Morphological variation, composition and age of submerged reefs on the Great Barrier Reef	Australian Earth Sciences Convention 82 July 2010 Canberra
PGRA	Abbey E A; Webster J M; Beaman R J	Submerged shelf edge features on Australia's Great Barrier Reef and their response to Quaternary sea-level changes	American Geophysical Union Fall Meeting San Francisco, USA PP11E-1475 December 2010
PGRA	Allen P K; Schmid S	Investigating the structural behaviour and phase transitions of the $Ba_{2x}Sr_{2-2x}TiSi_2O_8$ series of compounds	34th Annual Condensed Matter and Materials Meeting 49 2010
PGRA	Allen P K; Schmid S	Synthesis, structures and properties of modulated fresnoites	AsCA '09 - The Joint Meeting of the Chinese Crystallographic Society and Asian Crystallographic Society 85 2010
10/056	Guenette M C; Tucker M D; Ionescu M; Bilek M M M; McKenzie D R	Cathodic arc co-deposition of highly oriented hexagonal Ti and Ti_2AlC MAX phase thin films	Thin Solid Films 519 766–769 2010
07/013	Olmos MA; Birch G F	A novel method using sedimentary metals and GIS for measuring anthropogenic change in coastal lake environments	Environ Sci Pollut Res 17 270 - 287 2010
09/029	(Bourke S); Mairs L	Pre-urban animal economies of the Southern Levant: the faunal remains of Teleilat Ghassul and Pella	PhD Thesis 2009
09/029	(Bourke S); Gibbins S	Valley highland and steppe: processes of intensification in Northern Jordan in EB I-III	PhD Thesis 2009
PGRA	Brant W R; Schmid S; Gu Q; Withers R L; Hester J; Avdeev M	Temperature and composition dependent structural investigation of the defect perovskite series $Sr_{1-x}Ti_{1-2x}Nb_{2x}O_3$, $0 \leq x \leq 0.2$	Solid State Chemistry 183 1998-2003 2010
PGRA	Brant W R; Schmid S	Development of defect perovskites for use as cathode materials in lithium ion batteries	9th AINSE/ANBUG Neutron Scattering Symposium 33 December 2010 978-0-9807455-0-1
10/0924	Cameron L J; Chapman K W; Peterson V K; Kepert C J	Negative thermal expansion in Prussian blue analogues	9th AINSE/ANBUG Neutron Scattering Symposium 48 December 2010 978-0-9807455-0-1
PGRA	Chadbourne J J; Price D J; Peterson V K; Kepert C J	The negative thermal expansion properties of tetracyanidoborate coordination framework materials	9th AINSE/ANBUG Neutron Scattering Symposium 49 December 2010 978-0-9807455-0-1
03/179	(Donlon D); Williams A-M M	Elemental analysis of archaeological artefacts – the perils of PIXE	Australian Archaeological Association Conference 170-171 Adelaide 2010
PGRA	Fellows E A; Southon P D; Liu L; Price D J; Moubaraki B; Murray K S; Kepert C J	Dynamic interplay between spin crossover and host-guest function in porous coordination polymers	9th AINSE/ANBUG Neutron Scattering Symposium 11 December 2010 978-0-9807455-0-1
PGRA	Hackett M	Spectroscopic investigation of hypoxic/ischemic conditions during the pathogenesis of murine cerebral malaria	PhD Thesis 2010
PGRA	Aitken J B; Carter E A; Eastgate H; Hackett M J; Harris H H; Levina A; Lay P A <i>et al</i>	Biomedical applications of x-ray absorption and vibrational spectroscopies in obtaining structural information from complex systems	Radiat Phys Chem 79 176–184 2010 0969-806X

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
08/029	Bali R; Siegele R; Harris A T	Phytoextraction of Au: uptake, accumulation and cellular distribution in <i>Medicago sativa</i> and <i>Brassica juncea</i>	Chem Eng J 156 286-297 2010
08/029	Bali R; Siegele R; Harris A T	Biogenic Pt uptake and nanoparticle formation in <i>Medicago sativa</i> and <i>Brassica juncea</i>	J Nanopart Res 12 3087-3095 2010
07/066P	Harris A T; Maddocks A R	Synthesis of porous silicon carbide from cellulose fibre templates infiltrated with polycarbosilane	Mater Sci Tech-Lond 26 375-378 2010
08/029	Bali R; Siegele R; Harris A T	Biogenic separation, accumulation and cellular distribution of Cu, Co, and Ni in <i>Medicago sativa</i> under idealized conditions	Sep Sci Technol 45 1395-1401 2010
PGRA	Hynson R M G; Kwan A H; Jacques D A; Mackay J P; Trehwella J	¹ H, ¹³ C and ¹⁵ N backbone and side chain resonance assignments of the N-terminal domain of the histidine kinase inhibitor Kipl from <i>Bacillus subtilis</i>	Biomol NMR Assign 4 167-169 2010
PGRA	Jacques D A; Trehwella J	Small-angle scattering for structural biology - expanding the frontier while avoiding the pitfalls	Protein Sci 19 642-657 2010
09/0930	Kuang X; Li Y; Ling C D; Withers R L; Evans I R	Oxide ion conductivity, phase transitions and phase separation in fluorite-based Bi _{38-x} Mo _{7+x} O _{78+1.5x}	Chem Mater 22 4484-4494 2010
09/0930	Ling C D; Avdeev M; Kharton V V; Macquart R B <i>et al</i>	Structures, phase transitions, hydration and ionic conductivity of Ba ₄ Ta ₂ O ₉	Chem Mater 22 532-540 2010
09/0930	Miiller W; Causeret L; Ling C D	Frustrated magnetism and structural disorder in pyrochlore-type Bi _{1.89} Fe _{1.16} Nb _{0.95} O _{6.95}	J Phys-Condens Mat 22 486004 2010
09/0930	Ling C D; Kennedy B J; Zhou Q; Spencer J R; Avdeev M	Synthesis, structures, and phase transitions of barium bismuth iridium oxide perovskites Ba ₂ BiIrO ₆ and Ba ₃ BiIr ₂ O ₉	J Solid State Chem 22 727-735 2010
05/104	Lovell J L; Meadows J; Jacobsen G E	Upland olive domestication in the Chalcolithic Period: new ¹⁴ C determinations from El-Khawarij (Ajlun), Jordan	Radiocarbon 52 364-371 2010
08/133	Stockmann U; Minasny B; McBratney A; Fink D; Pietsch T	Investigating processes of pedogenesis in the Werrikimbe National Park, NSW, Australia	19th World Congress of Soil Science, Soil Solutions for a Changing World August 2010 Brisbane, Australia
PGRA	Ryves L	Deposition of nanostructured thin films using a high current pulsed arc	PhD Thesis 2010
PGRA	Miller Q; Christensen M; Khan A; Sharma N; Macquart R B; Avdeev M; McIntyre G J; Piltz R O; Ling C D	YCa ₃ (VO) ₃ (BO ₃) ₄ : a kagomé compound based on vanadium(III) with a highly frustrated ground state	Chemistry of Materials DOI: 10.1021/cm1034003
PGRA	Sharma N; Macquart R B; Avdeev M; Christensen M; McIntyre G J; Chen Y-S; Ling C D	Re-investigation of the structure and crystal chemistry of the Bi ₂ O ₃ -W ₂ O ₆ 'type Ib' solid solution using single crystal neutron and synchrotron x-ray diffraction	Acta Crystallographica Section B - Structural Science 66 165-172 2010
PGRA	Sharma N; Söhnel T; McIntyre G J; Piltz R O; Ling C D	Structure of BiRe ₂ O ₆ re-investigated using single-crystal neutron Laue diffraction	Journal of Physics: Conference Series 251 012028 4 pp 2010
05/150	Kachenko A; Bhatia N; Siegele R; Walsh K B; Singh B	Nickel, Zn and Cd localisation in seeds of metal hyperaccumulators using mu-PIXE spectroscopy	Nucl Instrum Meth B 267 2176-2180 2009
06/178	Torrence R; Swadling P; Kononenko N; Ambrose W; Rath P; Glascock M D	Mid-holocene social interaction in Melanesia: new evidence from hammer-dressed obsidian stemmed tools	Asian Perspectives: the journal of archaeology for Asia and the Pacific 48 119-148 2009

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
06/178	Kononenko N; Specht J; Torrence R	Persistent traditions in the face of natural disasters: stemmed and waisted stone tools in late Holocene New Britain, Papua New Guinea	Australian Archaeology 70 17-28 2010
PGRA	Wu Y; Peterson V K; Keperit C J	Tailored thermal expansion in metal-organic frameworks investigated through neutron and x-ray diffraction	9th AINSE/ANBUG Neutron Scattering Symposium 90 December 2010 978-0-9807455-0-1
PGRA	Lock N; Wu Y; Christensen M; Cameron L J; Peterson V K; Keperit C J <i>et al</i>	Elucidating negative thermal expansion in MOF-5	J Phys Chem C 114 16181-16186 2010

University of Tasmania

09/086	Wood SW; Hua Q; Allen K J; Bowman D M J S	Age and growth of a fire prone Tasmanian temperate old-growth forest stand dominated by <i>Eucalyptus regnans</i> , the world's tallest angiosperm	Forest Ecol Manag 260 438-447 2010
05/095; 06/097; 07/086	Kiernan K; Fink D; Grieg D; Mifud C	Cosmogenic radionuclide chronology of pre-last glacial cycle moraines in the Western Arthur range, Southwest Tasmania	Quaternary Sci Rev 29 3286-3297 2010
PGRA	Pedro J B; Heikkilä U E; Smith A M; van Ommen T D; Duldig M L	¹⁰ Be in Antarctic ice: solar activity and climate signals observed and GCM-modelled at high resolution	Astronomical Society of Australia Annual Science Meeting 68 Hobart July 2010
PGRA	Heikkilä U; Pedro J B; van Ommen T D; Smith A M	The ¹⁰ Be solar activity proxy: measured in Law Dome ice and modelled using the ECHAM5-HAM general circulation model	International Polar Year Oslo Science Conference 1141 Oslo June 2010
PGRA	Pedro J B; Heikkilä U E; van Ommen T D; Smith A M	¹⁰ Be in ice at high resolution: solar activity and climate signals observed and GCM-modeled in Law Dome ice cores	European Geophysical Union (EGU) General Assembly 12 Vienna May 2010
10/090P	Jones H; Macleod C; Swadling K; Tracey S; Butler E	Multiple lines of evidence to identify bioaccumulation mechanisms for mercury (Hg) in estuarine food webs with an emphasis on a recreationally targeted fish species	ICES Annual Conference section F 2 Nantes 2010

University of Technology Sydney

06/009	(Ben-Nissan B); Roest R	Interfacial characterisation of sol-gel derived coatings of hydroxyapatite and zirconia thin films with anodised titanium substrates	PhD Thesis 2009
09/091	(Doblin M); Djajadikarta R J	Phytoplankton and nutrient dynamics in NSW coastal waters	Honours Thesis 2010
09/104	Aldridge L P; Vessalas K; Fernado K; Da Costa M; Thomas P; Ray A	Comparision of durability measures of concrete as a function of cure times	Concrete in Australia 36 42 - 47 2010

The University of Western Australia

05/019; 07/019	Bradshaw S D	The Royal Society of Western Australia Medallist Lecture, 2010: ecophysiology and conservation of wildlife in Western Australia	J Roy Soc WA 93 147-158 2010
PGRA	Carroll M R J	The effects of polymer coatings on the proton transverse relaxivities of superparamagnetic nanoparticle MRI contrast agents	PhD Thesis 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
PGRA	Huffstetler P; Miles W; Reinholz C; Goff J D; Carroll M R J; Woodward R C <i>et al</i>	Synthesis, modeling and relaxivities of contrast agents for MRI	Abstracts of Papers of the American Chemical Society 236 255-POLY 2008
PGRA	Vadala M L; Goff J D; Mefford O T; Mejia-Ariza R; Woodward R C; Carroll M R J <i>et al</i>	Polydimethylsiloxane nanoparticle fluids for treating retinal detachment	Abstracts of Papers of the American Chemical Society 235 341-POLY 2008
PGRA; 06/199; 06/263	Boyer C; Priyanto P; Davis T P; Amal R; Carroll M; Woodward R <i>et al</i>	Anti-fouling magnetic nanoparticles for siRNA delivery	J Mater Chem 20 255-265 2010
PGRA; 06/199; 06/263	Caba B L; Zhang Q; Carroll M R J; Woodward R C; St Pierre T G; Gilbert E P <i>et al</i>	Nanostructure of PEO-polyurethane-PEO triblock copolymer micelles in water	J Colloid Interf Sci 344 81-89 2010
PGRA	Cortie D; Browne J; Saerbeck T; Downes J; Klose F	X-ray and magnetometry investigation of potential ferromagnetic semiconductor: HoN	9th AINSE/ANBUG Neutron Scattering Symposium 52 December 2010 978-0-9807455-0-1
PGRA	Tsen G K O	Investigation of molecular beam epitaxy grown p-type mercury cadmium telluride for infrared detector applications	PhD Thesis 2010

University of Western Sydney

08/019	(Dennis G); Eriksson-Scott K	The surface properties of star polymers	Honours thesis 2008
01/113P	Miley G H; Osman F; Evans P; Toups P; Mima K; Nakai S; Nishihara K <i>et al</i>	Single-event high-compression inertial confinement fusion at low temperatures compared with two-step fast ignitor	J Plasma Phys 69 413-429 2003
01/113P	Miley G H; Hora H; Osman F; Evans P; Toups P	Single event laser fusion using ns-MJ laser pulses	Laser Part Beams 23 453-460 2005
08/057	Sheppard L R; Atanacio A J; Bak T; Nowotny J; Nowotny M K; Prince K E	Niobium diffusion in niobium-doped titanium dioxide	J Solid State Electr 13 1115-1121 2009

University of Wollongong

09/0368	Nigam R; Pan A V; Kennedy S J; Studer A J; Stuesser N; Dou S X	Magnetic field dependent neutron diffraction studies of $Ru_{0.9}Sr_2YCu_{2.1}O_{7.9}$	J Appl Phys 107 09E134 2010
09/0368	(Dou S); Nigam R	Study of magnetic behaviour in Ru-based superconducting ferromagnets	PhD Thesis 2010
09/0368	Nigam R; Kennedy S J; Pan A V; Dou S X	Neutron powder diffraction studies of magnetic order in Ru-based high temperature magnetic superconductor	9th AINSE/ANBUG Neutron Scattering Symposium 38 December 2010 978-0-9807455-0-1
04/091P	Homes T P; Mattner F; Keller, P A <i>et al</i> .	Synthesis and evaluation of the sigma receptors ligand 4-((4-i-123]iodophenoxy)methyl)-1-(2-fluoroethyl)piperidine in animal tumour models	J Labelled Compd Rad 48 S263-S263 2005
08/039	(Lerch M); Khana S	Readout system for a synchrotron x-ray microbeam QA system	MSc Thesis 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
08/039	Wong J H D; Carolan M; Lerch M L F; Petasecca M; Khanna S <i>et al</i>	A silicon strip detector dose magnifying glass for IMRT dosimetry	Med Phys 37 427-439 2010
97/182S	Yavuz M; Maeda H; Vance L; Liu H K; Dou S X	Phase development and kinetics of high temperature Bi-2223 phase	J Alloy Compd 281 280-289 1998
98/129	Yavuz M; Maeda H; Vance L; Liu H K; Dou S X	Powder production methods of Bi-Pb-Sr-Ca-Cu-O superconductors	Supercond Sci Tech 11 1166-1172 1998
98/130	Yavuz M; Maeda H; Vance L; Liu H K; Dou S X	Effect of ball milling materials and methods on powder processing of Bi2223 superconductors	Supercond Sci Tech 11 1153-1159 1998
09/141	(Liu H K); Winton B R; Ionescu M; Dou S X; Wexler D; Alvarez G A	Structural and morphological modification of PDMS thick film surfaces by ion implantation with the formation of strain-induced buckling domains	Acta Mater 58 1861-1867 2010
FEL	Farbotko C; McGregor H V	Copenhagen, climate science and the emotional geographies of climate change	Australian Geographer 41 159-166 2010
10/077	McGregor H; Glasbergen L	Coral Sr/Ca records from Kiritimati and Rambutso Island: an eastside-westside story of late-Holocene sea surface temperature	Masters Thesis 2010
07/114P	(Morrison J); Liu D	Phytoplankton diversity and ecology in estuaries of southeastern NSW, Australia	PhD Thesis 2008
08/051	Hill P J; De Deckker P; von der Borch C; Murray-Wallace C V	Ancestral Murray River on the Lacepede Shelf, southern Australia: Late Quaternary migrations of a major river outlet and strandline development	Austral J Earth Sci 56 135-157 2009
02/091	Clarke S.J; Miller G.H; Murray-Wallace C V; David B; Pasveer J.M	The geochronological potential of isoleucine epimerisation in cassowary and megapode eggshells from archaeological sites	J Archaeol Sci 34 1051-1063 2007
10/1044	Ranjbar A; Kennedy S J; Guo Z P; Liu H K	<i>In situ</i> neutron diffraction study of the kinetics of hydrogen absorption and desorption in Mg based materials	9th AINSE/ANBUG Neutron Scattering Symposium 34 December 2010 978-0-9807455-0-1
06/151	(Ranson M); Berghofer P	Potential for use of a radioiodinated plasminogen activator inhibitor type-2 (PAI-2) as a diagnostic and therapeutic tool for metastatic cancer	BSc Honours Thesis 2007
08/056	Safavi-Naeini M; Franklin D R; Lerch M L F; Petasecca M; Reinhard M; Rosenfeld A B <i>et al</i>	Evaluation of silicon detectors with integrated JFET for biomedical applications	IEEE T Nucl Sci 56 1051-1055
10/0964	Trapp M; Gutberlet T; Juranyi F; Tehei M; van Eijck L; Unruh T; Peters J	Quasielastic and elastic scattering studies of aligned DMPC multilayers at different hydrations	American Conference on Neutron Scattering 92 June 2010 Canada
FEL	Trapp M; Juranyi F; Unruh T; Tehei M; Gutberlet T; Peters J	Elastic incoherent and quasielastic neutron scattering studies of aligned DMPC multilayers at different hydrations	4th International Workshop on Dynamics in Confinement 54 Grenoble March 2010 France
FEL	Trapp M; Juranyi F; Unruh T; Tehei M; Gutberlet T; Peters J	Elastic incoherent and quasielastic neutron scattering studies of aligned DMPC multilayers at different hydrations	ILL2020 Vision Future Directions In Neutron Science Grenoble 32 September 2010 France
FEL	Peters J; Trapp M; Masson P; Trovaslet M; Nachon F; Tehei M	Effect of pressure on the dynamics of proteins	IUCr High-Pressure Workshop 3 Gatlinburg September 2010 USA
FEL	Tehei M; Hill F R; Ioannou C; Koza M M; Van Eijck L; Dixon N E	Mapping protein dynamics conformational changes in replisomal macromolecular assemblies	35th Lorne Proteins Conference 116 February 2010

Project Number	Chief Investigator Coauthors	Title of Publication	Reference
10/0964	Hill F R; Ioannou C; Koza M M; Dixon N E; Tehei M	Structure, dynamics and function of replisomal protein complex	9th AINSE/ANBUG Neutron Scattering Symposium 23 December 2010 978-0-9807455-0-1
FEL	Trapp M; Gutberlet T; Juranyi F; Tehei M; Van Eijck L; Unruh T; Peters J	Quasielastic and elastic scattering studies of aligned DMPC multilayers at different hydrations	9th AINSE/ANBUG Neutron Scattering Symposium 82 December 2010 978-0-9807455-0-1
09/0964	Lopez M; Kurkal-Siebert V; Dunn R V; Tehei M; Finney J L; Smith J C; Daniel R M	Activity and dynamics of an enzyme, pig liver esterase, in near-anhydrous conditions	Biophys J 99 L62-L64 2010
09/0964	Trapp M; Gutberlet T; Juranyi F; Tehei M; Van Eijck L; Unruh T; Peters J	Hydration dependent studies of highly aligned multilayer lipid membranes by neutron scattering	J Chem Phys 133 164505 2010
09/0964	Jasnin M; Stadler A; Tehei M; Zaccai G	Specific cellular water dynamics observed <i>in vivo</i> by neutron scattering and NMR	Physical Chemistry Chemical Physics 12 10154-10160 2010
09/0964	Trapp M; Juranyi F; Tehei M; van Eijck L; Demé B; Gutberlet T; Peters J	Elastic scattering studies of aligned DMPC multilayers on different hydrations	Spectroscopy 24 461-466 2010
PGRA	Smith L; Waterman M; Robinson S A	Sunbaking in Australia and Antarctica: moss sunscreens induced by UVB radiation	Plant Biology 2010 Meeting 57 Montreal, Canada July-August 2010
09/019	Woodroffe C D; Brooke B P; Linklater M; Jones B G; Buchanan C; Hua Q; Zhao J <i>et al</i>	Response of coral reefs to climate change: expansion and demise of the southernmost Pacific coral reef	Geophys Res Lett 37 L15602 2010
PGRA	Wyatt A; Yerbury J; Dabbs R; Wilson M	The chaperone action of clusterin and its putative role in quality control of extracellular protein folding	Adv Cancer Res 104 89 2009
PGRA	Wyatt A R; Wilson M R	Identification of human plasma proteins as major clients for the extracellular chaperone clusterin	J Biol Chem 285 3532-3539 2010
PGRA	Lai N S; Lim W H; Ziebell A L; Reinhard M I; Rosenfeld A B; Dzurak A S	Development and fabrication of cylindrical silicon-on-insulator microdosimeter arrays	IEEE T Nucl Sci 56 1637-1641 2008 0018-9499

Member 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	CQUniversity	SCU	Southern Cross University
CSU	Charles Sturt University	USQ	University of Southern Queensland
CSI	CSIRO	USC	University of the Sunshine Coast
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
MEL	The University of Melbourne	VUW	Victoria University of Wellington
MON	Monash University	WOL	University of Wollongong

Specialist Areas

A	Archaeology and Geosciences
B	Biomedical Science and Biotechnology
E	Environmental Science
G	Bragg Institute - Neutron Scattering
M	Materials - Properties and Engineering
N	Materials - Structures and Dynamics