

SENATE FOREIGN AFFAIRS, DEFENCE AND TRADE COMMITTEE
INQUIRY INTO AUSTRALIA'S RELATIONSHIP WITH CHINA

BACKGROUND INFORMATION SUBMITTED BY
THE AUSTRALIAN RESEARCH COUNCIL

The Senate Foreign Affairs, Defence and Trade Committee is inquiring into Australia's economic and political relationship with China and Australian responses to China's emergence as a regional power.

The Australian Research Council (ARC)

The ARC's mission is to advance Australia's research excellence to be globally competitive and deliver benefits to the community. This entails activities in three broad areas: (i) supporting the best research which is most likely to contribute to innovation; (ii) brokering partnerships among researchers, industry, government, community organisations and the international community; and (iii) providing policy advice to the Australian Government on investment in the national research effort.

The National Competitive Grants Program (NCGP) is the primary vehicle by which the ARC pursues its mission. Funding for the Program – over \$480 million in 2004–05 – accounts for approximately nine per cent of the Commonwealth Budget for science and innovation. Support provided through the NCGP dominates competitive funding for university research and is one of the principal avenues for direct support of pure and strategic basic research in Australia's R&D system, as well as fostering university-industry collaboration in research.

ARC support for international research collaboration

A 2003 report by The Allen Consulting Group¹ – the most recent comprehensive study of Australia's international science and technology policies and programs – estimated that, under 1,452 grants, the ARC supported 2,725 international collaborations with researchers in 56 countries in 2002.

Collaborations with researchers in the US, the UK and Germany represented one-half of all collaborations (27 per cent, 14 per cent and nine per cent, respectively). Collaborations with researchers in France, Canada and Japan ranked next, each with a five per cent share of all collaborations. Collaborations with researchers in the China ranked equal sixth, with a three per cent share of all collaborations.

The Allen Consulting Group report noted that the ARC is an important source of funding for Australian researchers involved in international activities. Of those international science and technology expenditures characterised in the study, those of the ARC accounted for about 25 per cent of the estimated total Commonwealth Government expenditure, the highest of any Department or Agency.

The ARC has memoranda of understanding with 12 overseas research agencies in 11 countries, including one with the National Natural Science Foundation in China.

ARC support for research collaboration with China

Details of ARC support for research collaboration with China are provided in Tables 1 to 4, below.

¹ *A Study of International Science and Technology Policies and Programs*, The Allen Consulting Group, August 2003.

**Australian Research Council
National Competitive Grants Program
Collaboration with China**

Table 1: Incidences of collaboration*

Scheme		Year funding commenced				TOTAL
		2002	2003	2004	2005	
ARC Centres of Excellence	Number		4		3	7
	Funding** (\$)		31,653,360		41,500,000	73,153,360
Discovery Projects	Number	27	27	27	40	121
	Funding** (\$)	7,988,607	6,285,739	7,037,000	12,706,360	34,017,706
Federation Fellowships	Number		3	2	3	8
	Funding** (\$)		4,351,110	3,039,420	5,053,303	12,443,833
Linkage Infrastructure	Number			6		6
	Funding** (\$)			1,665,722		1,665,722
Linkage Projects	Number	2	2	11	3***	18
	Funding** (\$)	316,799	348,299	2,576,904	694,607***	3,936,609
Linkage International	Number	3	8	13	2	26
	Funding** (\$)	208,190	321,630	939,968	44,000	1,513,788
Seed funding for Research Networks	Number			3		3
	Funding** (\$)			381,115		381,115
Research Networks	Number			8		8
	Funding** (\$)			13,050,000		13,050,000
TOTAL NUMBER		32	44	70	51	197
TOTAL FUNDING** (\$)		8,513,596	42,960,138	28,690,129	59,998,270	140,162,133

* As nominated on application forms

** Funding over the life of the project

*** Linkage Projects (Round One) only

**Australian Research Council
National Competitive Grants Program
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Table 2: Collaborating organisations*

Project Id**	Organisation
CE0348245	Nankai University
LP0453488	Save the Children UK (China Programme)
LP0453698	Leadcel Dynamic Energy Corp. Ltd
LP0453766	Sopo Battery Energy Co., Ltd
LP0454174	Shanghai Municipal Labour and Social Security Bureau
LP0454943	Shanxi Medical Hospital
LP0454943	Sichuan Province
LP0454943	Shaanxi Province
LP0455369	Kanion Pharmaceutical Co. Ltd
LP0561084	Shanghai Municipal Labour and Social Security Bureau
RN0459895	Microsoft Research Asia

* Collaborating organisations as nominated on application forms; collaborating organisations are required to provide a cash/in-kind contribution to the research project

** where CE = Centre of Excellence, LP = Linkage Projects, RN = Research Networks

**Australian Research Council
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Table 3: Incidences of collaboration (see Table 1 for summary)

[where C-E = Centre of Excellence, D-P = Discovery Projects, F-F = Federation Fellowships, LA = Australian Postgraduate Awards Industry (part of Linkage Projects scheme, L-E = Linkage Infrastructure Equipment and Facilities, L-P = Linkage Projects, LSR = Seed funding for Research Networks, L-X = Linkage International, R-N = Research Networks]

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
CE0348249	C-E	The University of Queensland	Australian Centre for Complex Systems (ACCS)	Lindsay, P	2003	4508295	2007
CE0348243	C-E	The University of Queensland	The Australian Centre for Functional Nanomaterials	Lu, G	2003	7663180	2007
CE0348245	C-E	University of Wollongong	Australian Centre for Nanostructured Electromaterials	Wallace, G	2003	7306885	2007
CE0348155	C-E	The University of New South Wales	Centre for Advanced Silicon Photovoltaics and Photonics	Wenham, S	2003	12175000	2007
CE0561595	C-E	University of Tasmania	ARC Centre of Excellence - in Ore Deposits	Large, R	2005	15000000	2010
CE0561574	C-E	Monash University	ARC Centre of Excellence - Design in Light Metals	Muddle, B	2005	14500000	2010
CE0561616	C-E	University of Wollongong	ARC Centre of Excellence - Australian Centre for Electromaterials Science	Wallace, G	2005	12000000	2010
DP0208208	D-P	The University of Melbourne	The phase and inverse scattering problem for electrons multiply scattered by non-periodic solids	Allen, L	2002	180000	2004
DP0208831	D-P	The Australian National University Institute of Advanced Studies	Understanding the early phases of Neolithic dispersal in the western Pacific.	Anderson, A	2002	345550	2004
DP0211483	D-P	The University of Sydney	Abstract methods for nonlinear partial differential equations	Dancer, N	2002	230045	2004
DP0208747	D-P	Monash University	Making a Spectacle of Disagreement: Media and Controversy in Modern Chinese Thought	Davies, G	2002	93985	2004
DP0209556	D-P	The University of Melbourne	The Paichusuo (the Chinese police station): How Governments Construct Private Lives	Dutton, M	2002	261000	2004

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
DP0210531	D-P	Australian Catholic University	Citizenship, Governance and Gender: Chinese Women in Political Action	Edwards, L	2002	187109	2004
DP0211641	D-P	University of Technology, Sydney	Party-state, Liberalism and Social Democracy: the debate on China's future	Feng, C	2002	96300	2004
DP0209623	D-P	The University of Western Australia	Nonparametric and Semiparametric Approaches in Nonlinear Time Series Econometrics and Financial Econometrics	Gao, J	2002	99000	2004
DP0210416	D-P	The University of Queensland	Emerging applications of advanced computational methods and discrete mathematics.	Havas, G	2002	290000	2004
DP0208846	D-P	Monash University	Democratising Taiwan	Jacobs, J	2002	91500	2004
DP0211233	D-P	University of Wollongong	Mechanics of Cold Rolling of Thin Strip	Jiang, Z	2002	524492	2006
DP0209093	D-P	University of Wollongong	The Overseas Chinese Water Frontier of Southeast Asia, 1700-1900	Li, T	2002	293717	2004
DP0210152	D-P	Macquarie University	Manichaeism and Medieval Christian (Nestorian and Catholic) remains in Quanzhou (S. China) - an epigraphical, iconographical and historical investigation	Lieu, S	2002	242671	2004
DP0209838	D-P	Griffith University	Changing East Asia's Economic and Political Regimes: What Kind of Markets? What Kind of Politics?	Liew, L	2002	125000	2004
DP0211701	D-P	University of Technology, Sydney	Group Decision Support Systems for Fuzzy Multi-objective Decision Problems	Lu, J	2002	187118	2004
DP0209445	D-P	The University of Melbourne	Tai, Sino-Tai and Sino-Tibetan: the Nature of Historical Relationship	Luo, Y	2002	115000	2004
DP0208327	D-P	The Australian National University Institute of Advanced Studies	Private Wealth Accumulation, Wealth Distribution, and Social Welfare Reform in Urban China	Meng, X	2002	270000	2004

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
DP0210719	D-P	The University of Queensland	Crustal fault system dynamics and earthquake prediction	Mora, P	2002	217120	2004
DP0210702	D-P	The University of Adelaide	Fibre reinforced polymer retrofitting of reinforced concrete flexural members	Oehlers, D	2002	179000	2004
DP0210311	D-P	Macquarie University	How has the continental lithosphere evolved? Processes of assembly, growth, transformation and destruction	O'Reilly, S	2002	1355000	2006
DP0211292	D-P	The University of Adelaide	Energetic particle interactions in the universe: consequences for cosmic ray, gamma ray and neutrino astrophysics	Protheroe, R	2002	296000	2004
DP0208490	D-P	The University of Melbourne	Topics on 3- and 4-dimensional manifolds.	Rubinstein, J	2002	466000	2006
DP0209592	D-P	The University of New South Wales	The Role and Impact of the Social Support System on the Well-being of the Elderly in China	Saunders, P	2002	158000	2004
DP0210312	D-P	The University of Sydney	Super-resolution in microscopy and optical recording	Sheppard, C	2002	356000	2004
DP0208246	D-P	The University of Sydney	Evolutionary ecology of snakes and lizards	Shine, R	2002	932000	2006
DP0211244	D-P	University of Wollongong	Mechanics of mixed film lubrication in strip rolling	Tieu, A	2002	231000	2004
DP0209660	D-P	The University of Queensland	Composite Mesoporous Solids of TiO2 Nano-Crystals and Silicate as Photo-catalysts for Degradation of Organic Contaminants in Water	Zhu, H	2002	166000	2004
DP0345613	D-P	The University of Adelaide	Globalization, WTO and sustainable development: new challenges, opportunities and implications for Australia	Anderson, K	2003	258000	2005
DP0344221	D-P	The Australian National University	Geometric evolution equations and global effects of curvature	Andrews, B	2003	400000	2007
DP0344400	D-P	Macquarie University	Crustal Evolution in Australia: Ancient and Young Terrains	Belousova, E	2003	298035	2005

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DP0343600	D-P	Murdoch University	Population Genetics of Fungal Pathogens that Threaten the Biosecurity of Australia's Eucalypts	Burgess, T	2003	260000	2005
DP0343068	D-P	Murdoch University	University Responses to Globalisation in Singapore, Hong Kong, and China	Currie, J	2003	100000	2005
DP0342966	D-P	The University of Melbourne	Branding Cities on the West Pacific Rim: Cinematic Traditions and Tourism Marketing Strategies in Hong Kong, Shanghai and Sydney.	Donald, S	2003	167618	2005
DP0344111	D-P	The University of New England	Free boundary problems in partial differential equations and related topics	Du, Y	2003	158000	2005
DP0346703	D-P	University of Wollongong	Design of Improved Shape Memory Steels by Control of Parent Phase Precipitation Strengthening and Stacking Fault Energy	Dunne, D	2003	155000	2005
DP0342864	D-P	The University of New South Wales	CROSS-CULTURAL DIFFERENCES IN PERCEPTIONS OF CONSUMPTION ETHICS	Eckhardt, G	2003	122500	2004
DP0345832	D-P	The University of Sydney	Intelligent Biomedical System Modelling and Multi-modality Image Analysis to Maximize Diagnostic Information from Medical Imaging	Feng, D	2003	172536	2005
DP0344466	D-P	The University of Melbourne	Fashionable Times: An Inquiry into the History of China's Modernity	Finnane, A	2003	99000	2004
DP0343541	D-P	Macquarie University	Dual wavelength quantum dot light detectors	Goldys, E	2003	245000	2005
DP0344767	D-P	University of Technology, Sydney	China's invisible economic leadership: women in family enterprises	Goodman, D	2003	203000	2005
DP0344782	D-P	The University of New England	The Early Modern Economy, East Asia 1500-1700AD	Grave, P	2003	131000	2005
DP0345907	D-P	Queensland University of Technology	Internationalising Creative Industries: China, the WTO and the Knowledge-based Economy	Hartley, J	2003	343033	2005
DP0345973	D-P	The University of Sydney	Reflection groups	Howlett, R	2003	155000	2005

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DP0345225	D-P	The University of Sydney	Varying similarity metrics in indexing and retrieving high dimensional data	Jin, J	2003	155000	2005
DP0344462	D-P	The University of Western Australia	Symmetrical graphs, generalized polygons and expanders	Li, C	2003	589275	2007
DP0345880	D-P	The University of Western Australia	Comparative Study of MnAs and Co-Based Magnetoelastic Functional Materials	Liu, Y	2003	125000	2004
DP0343023	D-P	The University of Sydney	Quantized representation theory	Mathas, A	2003	185000	2005
DP0345769	D-P	The University of New South Wales	Heat transfer processes in evacuated tubular solar absorbers	Morrison, G	2003	210000	2005
DP0342588	D-P	The University of Sydney	The Politics of Transition in China, 1972-1982	Teiwe, F	2003	197000	2005
DP0343030	D-P	The Australian National University	Variational problems of Monge-Ampere type	Trudinger, N	2003	424000	2005
DP0344108	D-P	The Australian National University	The History of an Urban Chinese Factory Community in Transition	Unger, J	2003	283742	2005
DP0342724	D-P	The University of Queensland	Algebraic Structures and Correlations in Quantum Many-Body Systems	Zhang, Y	2003	60000	2004
DP0346091	D-P	The University of New South Wales	Microelectronic Applications of Improved Silicon Light Emission	Zhao, J	2003	630000	2007
DP0342607	D-P	The University of Melbourne	Implications of Emerging Forms of Labour Management in Transitional Economies for Households Livelihood Strategies: China and Vietnam	ZHU, Y	2003	159000	2005
DP0453262	D-P	The University of New South Wales	Time frame for the evolution of Australia's extraordinary mammals	Archer, M	2004	300000	2006
DP0449834	D-P	The Australian National University	The Social History of Punishment in Modern China	Barme, G	2004	274000	2006
DP0452296	D-P	Deakin University	LATE PALAEOZOIC PALAEOGEOGRAPHY OF CENTRAL ASIA: A PALAEOBIOGEOGRAPHICAL APPROACH USING IMPROVED BIOSTRATIGRAPHY	Chen, Z	2004	210000	2006

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DP0449758	D-P	The University of Western Australia	Human Impact and Environmental Change in the Lower Yangtze Delta, China	Dodson, J	2004	106600	2005
DP0452477	D-P	The University of Sydney	Smart Information Use for PET-CT Quantitative Molecular Imaging	Feng, D	2004	700000	2008
DP0452187	D-P	The University of Adelaide	Seismic wave modelling and inversion for the most general 3-D anisotropic media	Greenhalgh, S	2004	270000	2006
DP0450275	D-P	The University of Queensland	Structure and inhibition of acetohydroxyacid synthase	Guddat, L	2004	210000	2006
DP0452030	D-P	University of Tasmania	Western Theory of Deliberative Democracy and Chinese Practice of Participatory and Deliberative Institutions	He, B	2004	105000	2006
DP0451687	D-P	The University of Melbourne	The Old Zhuang Script: a Vernacular Character Script from Southern China	Holm, D	2004	280000	2006
DP0449848	D-P	Monash University	Frontiers in synthetic and structural rare earth chemistry	Junk, P	2004	900000	2008
DP0449429	D-P	The University of Western Australia	Factorisation of Finite Groups and Graphs	Li, C	2004	300000	2006
DP0450020	D-P	The University of Western Australia	Understanding the Sibao Orogenic Belt in South China: A Part of the Rodinian Supercontinent Assembly Adjacent to Australia	Li, Z	2004	170000	2006
DP0449431	D-P	The Australian National University	Multicast in Single-Hop and Multi-Hop WDM Optical Networks	Liang, W	2004	195000	2006
DP0450025	D-P	La Trobe University	Settlement patterns, craft production, and the rise of early states in China	Liu, L	2004	570400	2008
DP0452696	D-P	Murdoch University	Multidimensional unfolding: the latitude of acceptance and the structure of the single peaked response process in a multidimensional space	Luo, G	2004	90000	2006
DP0452193	D-P	Macquarie University	Latitudinal gradients in biotic processes affecting plant growth and establishment.	Moles, A	2004	360000	2007

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DP0450735	D-P	The Australian National University	Collaboration, Nationalism and Imperial Strategy: Japanese-trained Armies in Northeast Asia 1932-1949	Narangoa, L	2004	122000	2006
DP0453077	D-P	The Australian National University	The political economy of preferential trade in the Western Asia Pacific region	Ravenhill, F	2004	150000	2005
DP0451722	D-P	The University of Sydney	Empirical saddlepoint approximations and self-normalized limit theorems	Robinson, J	2004	225000	2006
DP0451492	D-P	Curtin University of Technology	Maid in China: Gendered Mobilities, Internal Migration, and the Translocal Imagination	Sun, W	2004	140000	2006
DP0450837	D-P	The Australian National University	Asia's first people: the role of East Asia in human evolution during the past half million years.	Thorne, A	2004	150000	2006
DP0452844	D-P	University of Wollongong	Contact mechanics in hot strip rolling	Tieu, K	2004	294000	2006
DP0452961	D-P	The Australian National University	Art and Human Rights in the Asia-Pacific: The Limits of Tolerance in the Twenty-First Century	Turner, C	2004	165000	2006
DP0452489	D-P	The University of New South Wales	Patterns of Buyer Behaviour in China	Uncles, M	2004	155000	2006
DP0453299	D-P	The University of Western Australia	Quantum dynamics of solid-state qubits	Wang, J	2004	210000	2006
DP0452537	D-P	The University of Sydney	An innovative approach to fabricate thermally stable polymer/layered silicate nanocomposites	Yu, Z	2004	245000	2006
DP0452443	D-P	The University of Queensland	Chemical and isotopic fingerprinting of ancient porcelains and pottery	Zhao, J	2004	140000	2006
DP0559893	D-P	University of Wollongong	Intellectual Property enforcement and awareness building in China, Thailand and Indonesia	Antons, C	2005	94000	2007
DP0559251	D-P	Deakin University	Exploiting Database Technologies for the Visualization and Analysis of Measured and Simulated Plant Structures in Bioinformatics	Chen, Y	2005	150000	2007
DP0557847	D-P	University of Wollongong	Multi-resolution phase measuring profilometry for dynamic 3D digital imaging	Chicharo, J	2005	243000	2007

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DP0559206	D-P	Murdoch University	The Democratisation of Documentary Cinema in China	Chu, Y	2005	75088	2006
DP0557154	D-P	University of Technology, Sydney	Generalizing Multi-level Decision Support Handling Multi-objectives, Multi-followers and Uncertainty for Critical Resource Planning	Dillon, T	2005	559453	2009
DP0556939	D-P	The University of New South Wales	Australian climate extremes and predictability in a changing CO2 world: the unique role of the Southern Hemisphere extratropical ocean-atmosphere	England, M	2005	225000	2007
DP0559161	D-P	University of Technology, Sydney	Democrats within the Chinese Communist Party and China's Democratic Future: The Case of Li Shenzhi	Feng, C	2005	90000	2007
DP0559454	D-P	Walter & Eliza Hall Institute of Medical Research	Intrinsically Unstructured Proteins (IUPs): NMR characterization, prediction, and application to malarial proteome	Feng, Z	2005	202482	2007
DP0555986	D-P	James Cook University	CO2-brine behaviour in high temperature geological processes: Microanalysis and significance	Fu, B	2005	270000	2007
DP0558602	D-P	The University of Western Australia	Nonlinear and Nonstationary Time Series Econometrics: Theory and Applications	Gao, J	2005	355000	2007
DP0555935	D-P	University of Technology, Sydney	Germany in China: Colonial Interactions, Qingdao 1897-1914	Goodman, D	2005	410000	2007
DP0559398	D-P	The University of Sydney	Theoretical and Numerical Analyses on Smart-Cut Technology	Gu, B	2005	220644	2007
DP0556537	D-P	University of Technology, Sydney	Openness in China under the WTO Regime: the Case of Dingzhou	Guo, Y	2005	120000	2007
DP0555977	D-P	The University of Melbourne	Babel in business: how language differences influence management in multinationals	Harzing, A	2005	185000	2007
DP0557349	D-P	The University of Western Australia	Nano/micro grinding mechanisms and technologies for brittle materials	Huang, H	2005	730000	2009

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DP0559647	D-P	The University of Sydney	A scheme and a formal language for interactive video	Jin, J	2005	211000	2007
DP0559183	D-P	Monash University	The World Trade Organization and Human Rights	Joseph, S	2005	240000	2007
DP0556422	D-P	The Australian National University	Quality and the Culture of Hierarchy, Governance and Socialization in Contemporary China	Kipnis, A	2005	141434	2007
DP0556642	D-P	The University of Melbourne	From crystal to craton: unravelling the low-temperature thermal evolution and long-term stability of cratonic lithosphere	Kohn, B	2005	270000	2007
DP0559461	D-P	Queensland University of Technology	EMERGENCY CONTROL FOR POWER SYSTEM SEPARATION	Ledwich, G	2005	255000	2007
DP0559325	D-P	The University of Sydney	Geometric structures in representation theory	Lehrer, G	2005	825000	2009
DP0558510	D-P	The Australian National University	Private Responses to Demographic Change and Pension Reform in Urban China	Meng, X	2005	325000	2007
DP0557218	D-P	Monash University	Increasing Returns and Economic Efficiency	Ng, Y	2005	256259	2007
DP0557157	D-P	The University of Western Australia	A New Approach to Studying Whole Bodies and Body Parts Applied to Problems of Forensic Science	Oxnard, C	2005	293000	2007
DP0559131	D-P	The University of Melbourne	Congestion Control for the Future Internet	Palaniswami, M	2005	523000	2007
DP0558634	D-P	The University of New South Wales	Elasto-plastic distortional analysis and strength of structures doubly-curved in space	Pi, Y	2005	268000	2007
DP0556685	D-P	The University of New South Wales	Constrained and Stable Solutions of Nonlinear and Semismooth Equations	Qi, L	2005	277000	2007
DP0556942	D-P	The Australian National University	Polymer optical fibres with controlled molecular orientation for photonic applications	Samoc, A	2005	388000	2007
DP0556626	D-P	The University of New South Wales	On the Geometry of Liquid Crystals and Biological Membranes	Schief, W	2005	303000	2007

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DP0560162	D-P	The University of New South Wales	Predicting soil loss from wind erosion, using an integrated, high resolution, land surface data assimilation-modelling system	Shao, Y	2005	255000	2007
DP0556411	D-P	James Cook University	Sedimentary phosphorites as geochemical sponges: trace element scavenging, the chemical evolution of seawater and an innovative method for dating sediments	Shields, G	2005	190000	2007
DP0559567	D-P	University of Technology, Sydney	Retrofit of Reinforced Concrete Beam-Column Connections with Fibre Reinforced Polymer (FRP) Composites	Smith, S	2005	283000	2007
DP0557493	D-P	University of Wollongong	Short Signatures: Tools for Securing Digital Transactions, and Their Applications	Susilo, W	2005	192000	2006
DP0558508	D-P	The University of Melbourne	Synaptic and network properties underlying neural coding in the mammalian visual cortex	Vidyasagar, T	2005	230000	2007
DP0558773	D-P	Macquarie University	Private Information Retrieval	Wang, H	2005	296000	2007
DP0558134	D-P	The University of Queensland	Cardiac electrographic modelling and analysis	Wilson, S	2005	398000	2007
DP0558792	D-P	Curtin University of Technology	An innovative computational technique for the study and control of oscillation marks in continuous casting of steel	Wu, Y	2005	190000	2007
DP0557970	D-P	The University of New South Wales	Granular dynamics: theories, modelling and simulation	Yu, A	2005	1202000	2009
DP0557213	D-P	The University of Queensland	Surface Nanocrystallization and Surface Alloying of Nonferrous Alloys	Zhang, M	2005	605000	2009
DP0557945	D-P	The University of Sydney	Reactions of Nanoparticles of Metal Oxides and Hydrous Oxides and their Applications in Photocatalysts and Electrode Materials	Zhu, H	2005	360000	2007
FF0348350	F-F	The Australian National University	Quantum and atom optics	Bachor, H	2003	1450370	2007

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FF0348603	F-F	The University of Queensland	Cellular Plasticity in the Brain: discovering molecular mechanisms controlling the production of neurons during brain development, function, ageing and disease.	Bartlett, P	2003	1450370	2007
FF0348378	F-F	The University of Queensland	Molecular Engineered Nanomaterials for Advanced Fuel Cells	Lu, G	2003	1450370	2007
FF0457313	F-F	The University of Adelaide	Using ancient DNA to understand Australia's past and manage its future	Cooper, A	2004	1519710	2009
FF0455875	F-F	The Australian National University	COMPLEX NETWORKS: DYNAMICS, OPTIMIZATION AND CONTROL	Hill, D	2004	1519710	2009
FF0561370	F-F	The Australian National University	Beijing: China's Heritage and the City as Spectacle	Barme, G	2005	1551625	2010
FF0561429	F-F	Monash University	Design in Nanostructured Materials - Formation and Stability of Nanostructure in Light Alloys and Light Metal Hybrids	Muddle, B	2005	1551625	2010
FF0561762	F-F	The University of Sydney	The diversity and assembly of optics in nature	Parker, A	2005	1950053	2010
LP0347077	L-A	University of Tasmania	Chinese imprint on Tasmania and consequent connnections with China	Gao, M	2003	91299	2006
LP0455386	L-A	Deakin University	The Role of Communication in Sino-Australian Business Negotiations: An Appraisal	Hartel, C	2004	82315	2007
LE0453801	L-E	La Trobe University	Asia/Pacific HIV/AIDS Database: Support for Regional Policy Research	Altman, D	2004	102900	2004
LE0453398	L-E	Monash University	A Non Contact Facility For Measuring Irreversible Energy, Residual Stress, and Full Field Stresses for Critical Rail Infra-Structure Assessment	Jones, R	2004	161075	2004
LE0454008	L-E	Swinburne University of Technology	Multi-function high resolution-analytical scanning electron microscope facility	Pratt, K	2004	340962	2004
LE0453671	L-E	Southern Cross University	NMR Facility for Natural Products Research	Waterman, P	2004	133770	2004

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
LE0453842	L-E	The University of Western Australia	National Facility for Electron Spin Correlations and Spintronics	Williams, J	2004	590309	2004
LE0453561	L-E	The University of Sydney	Integrated Precision Machining of Complex Profiles	Zhang, L	2004	336706	2004
LP0219309	L-P	University of Wollongong	Investigation of Nano-materials for use in Lithium Rechargeable Batteries	Liu, H	2002	198141	2005
LP0209274	L-P	Deakin University	Cultural Heritage Site Significance, Management and Interpretation in China and Australia: A Comparative Analysis in a Cross-Cultural Framework	Logan, W	2002	118658	2004
LP0349048	L-P	The University of Adelaide	Development of sophisticated structural design guidelines for the new building product known as Rapidwall	Wu, Y	2003	257000	2006
LP0454943	L-P	University of Technology, Sydney	Improving Birth Outcomes in China: consequences and potentials of policy, state and professional interactions.	Barclay, L	2004	370000	2007
LP0454859	L-P	The University of New South Wales	Western Australia severe weather prediction: optimising forecasts using new data sources and improved high-resolution models	Leslie, L	2004	230505	2007
LP0453698	L-P	University of Wollongong	Lithium/Sulfur rechargeable battery for power applications	Liu, H	2004	225000	2006
LP0455473	L-P	The Australian National University	LANGUAGES OF SECURITY IN THE ASIAN REGION AND AUSTRALIA	Milner, A	2004	530671	2007
LP0454174	L-P	Monash University	Business Social Protection Behaviour in China	Nyland, C	2004	111945	2006
LP0455369	L-P	University of Technology, Sydney	Development of natural herbal medicines for managing metabolic syndrome in order to prevent type 2 diabetes	Qu, X	2004	227967	2007
LP0453488	L-P	The University of New South Wales	The Extent and Cost of Kinship Foster Care of Orphans in Rural China	Saunders, P	2004	185782	2005

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
LP0453766	L-P	University of Wollongong	Large-scale rechargeable lithium battery for power storage and electric vehicle applications	Wang, G	2004	341647	2007
LP0455082	L-P	Curtin University of Technology	An Advanced Numerical Technique for Stability Analysis of Mining Excavations in Jointed/Faulted Rock Masses under High Stresses	Wu, Y	2004	76072	2007
LP0454065	L-P	The University of Melbourne	Isothermal Forging of Titanium Aluminide Based Intermetallic Alloys for Golf Club Head Applications	Xia, K	2004	195000	2006
LP0560463	L-P	The University of New South Wales	Applicability of the Longwall Top Coal Caving in Australian Underground Coal Mines	Hebblewhite, B	2005	225000	2007
LP0560628	L-P	The Australian National University	The Internationalisation Of Charlie Chaplin's Tramp	MacDougall, D	2005	336000	2007
LP0561084	L-P	Monash University	The Social and Business Implications of Extending China's Social Security System	Smyth, R	2005	133607	2007
SR0567388	LSR	Curtin University of Technology	Grid-enabled fusion of global data and local knowledge – applying the INWA Grid to eResearch links with China	Lloyd, A	2004	50000	2005
SR0566892	LSR	The University of Sydney	The EarthByte software and database system	Muller, R	2004	220000	2005
SR0563610	LSR	RMIT University	Developing an E-Platform for Application of Clinical Management in the Human Respiratory and Vascular System	Tu, J	2004	111115	2005
LX0240468	L-X	University of Wollongong	Interactive video on-demand for e-learning	Chou, C	2002	52000	2004
LX0242363	L-X	University of Wollongong	Effects of oxide scale on the mechanics of contacts in hot strip rolling	Tieu, K	2002	84490	2004
LX0211249	L-X	The University of Melbourne	Development of Creep Resistant TiAl Alloys for High Temperature Structural Applications	Xia, K	2002	71700	2004
LX0349233	L-X	The University of Queensland	Design and evaluation of new environmentally-benign herbicides that inhibit branched-chain amino acid biosynthesis	Duggleby, R	2003	35200	2005

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
LX0346913	L-X	The University of Queensland	Quantized Algebraic (Super) Structures and Applications	Gould, M	2003	66000	2005
LX0451750	L-X	The University of Western Australia	Deep Coal Mining	Liu, J	2003	29100	2004
LX0347471	L-X	The University of Queensland	Spin tunnelling transport and quantum effects in magnetic nanostructures	Sun, H	2003	21800	2005
LX0348548	L-X	The University of Sydney	Structural and multidisciplinary optimization	Tong, L	2003	74000	2005
LX0454366	L-X	The University of Queensland	Bulk Metallic Glasses and Their Applications	Wang, H	2003	47180	2005
LX0346201	L-X	Deakin University	New hybrid fibres incorporating nano protein materials	Wang, X	2003	33350	2004
LX0346249	L-X	University of Wollongong	Meta-Ontology based Protocols for the Cooperation in Heterogeneous Agent Systems	Zhang, M	2003	15000	2004
LX0454381	L-X	La Trobe University	Empire to Republic: Politics and Culture in China's 20th Century History	Fitzgerald, J	2004	93000	2006
LX0455606	L-X	Griffith University	Modelling of sand wave migration and its interaction with pipelines	Jeng, D	2004	53800	2007
LX0560210	L-X	University of South Australia	Feasibility of biological hydrogen production from biomass wastes using activate sludge microorganisms	Jin, B	2004	76844	2005
LX0560166	L-X	The University of Queensland	Meso- and Macro-porous Bioactive Glasses for Bone-repairing	Lu, G	2004	94152	2005
LX0454282	L-X	Macquarie University	How has continental lithosphere evolved? Processes of assembly, growth, transformation and destruction	O'Reilly, S	2004	120000	2006
LX0560185	L-X	University of Wollongong	Combinatorial structures for computer security and communication	Seberry, J	2004	120000	2005
LX0348047	L-X	Deakin University	Gondwana in East Asia? A biogeographic test using Permian marine invertebrate biota	Shi, G	2004	44000	2005

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
LX0455404	L-X	The Flinders University of South Australia	Redefining bullying and adjustment to school: Japanese and Australian	Slee, P	2004	27420	2006
LX0455066	L-X	University of Wollongong	Mechanics of Thin Strip Steering in Hot Rolling	Tieu, K	2004	66700	2006
LX0453663	L-X	The Australian National University	Urban Imaginaries/Cultural Landscapes: An Asia-Pacific Transnational and Cross-Cultural Research Collaboration	Turner, C	2004	78300	2007
LX0559831	L-X	The University of Queensland	Mid-Holocene coral reef bleaching and recovery in the South China Sea and its implications for the modern Great Barrier Reef	Zhao, J	2004	85752	2005
LX0454455	L-X	The University of Sydney	Nanostructures of Titanium Dioxide and Titanates by Wet-chemistry	Zhu, H	2004	32000	2007
LX0455717	L-X	The University of Queensland	Structure of Epitaxial Semiconductor Quantum Dots	Zou, J	2004	48000	2007
LX0559621	L-X	University of Wollongong	Photon induced nonlinear absorption and transport in semiconductor nanostructures	Zhang, C	2005	26000	2007
LX0561262	L-X	The University of Queensland	A Novel Surface Alloying Technique to Improve the Corrosion and Wear Resistance of Magnesium Alloys	Zhang, M	2005	18000	2007
RN0460006	R-N	The Australian National University	ARC Complex Open Systems Research Network	Dewar, R	2004	1500000	2009
RN0460310	R-N	The Australian National University	ARC Asia-Pacific Futures Research Network	Edwards, L	2004	1500000	2009
RN0457921	R-N	The University of Adelaide	ARC Research Network for Understanding and Managing Australian Biodiversity	Hill, R	2004	1500000	2009
RN0459557	R-N	The University of Melbourne	ARC Research Network for a Secure Australia	Mendis, P	2004	1950000	2009
RN0459895	R-N	The University of Queensland	ARC Research Network in Enterprise Information Infrastructure	Orlowska, M	2004	1600000	2009
RN0460293	R-N	Griffith University	ARC Governance Research Network	Sampford, C	2004	1500000	2009
RN0460314	R-N	The University of Western Australia	ARACY/ARC/NHMRC Research Network: Future Generation	Stanley, F	2004	1750000	2009

Project Id	Scheme	Organisation	Project_Title	Name of first-named Chief Investigator	Start Year	Total Funding (\$)	End Year
RN0459928	R-N	The University of Queensland	ARC Cultural Research Network	Turner, G	2004	1750000	2009

**Australian Research Council
National Competitive Grants Program
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Table 4: Partner investigators

[where CE = Centre of Excellence, DP = Discovery Projects, LE = Linkage Infrastructure Equipment and Facilities, LP = Linkage Projects, , LX = Linkage International, RN = Research Networks, SR = Seed funding for Research Networks]

Project	Name	Organisation	Department
CE0348245	Prof Dr J Chen	Nankai University	Institute of New Energy Material Chemistry
DP0208327	Prof S Li	Chinese Academy of Social Sciences	Institute of Economics
DP0209592	Prof X Zhang	Beijing Normal University	Institute of Social Deelopment and Public Policy
DP0209660	Prof Dr J Zhao	The Chinese Academy of Science	Institute of Chemistry
DP0210152	Prof R Niu	Xianjiang University, Urumchi (PRC)	Department of Altaic Studies
DP0210311	Prof X Xu	Nanjing University	Department of Earth Sciences
DP0210702	Prof J Teng	Hong Kong Polytechnic University	Dept. of Civil and Structural Engineering
DP0345880	Prof B Jiang	Shanghai Jiao Tong University	School of Materials Science and Engineering
DP0449758	Prof Z Chen	East China Normal University	Department of Geography
DP0449758	Prof H Zheng	Tongji University	Department of Marine Geology and Geophysics
DP0450020	Prof X Li	Chinese Academy of Sciences	Guangzhou Institute of Geochemistry
DP0450025	Prof X Chen	Chinese Academy of Social Sciences	Institute of Archaeology
DP0452844	Prof XH Liu	Northeastern University	State Key Laboratory of Rolling Technology and Automation
DP0557213	Prof K Lu	Chinese Academy of Sciences	Institute of Metal Research
DP0557213	A/Prof Y Shi	Institute of Metal Research, Chinese Academy of Sciences	Shenyang National Laboratory for Materials Science
DP0557493	Dr F Zhang	Zhongshan University	School of Information Science and Technology
DP0557847	Prof Dr X Peng	Shenzhen University	Institute of Optoelectronics
DP0557945	Prof Dr J Zhao	The Chinese Academy of Science	Institute of Chemistry

Project	Name	Organisation	Department
DP0557945	Prof Dr X Gao	Nankai University	Deputy director of the institute New Energy Material Chemistry
DP0558134	Dr L Xia	Zhejiang University	Department of Biomedical Engineering
DP0559131	Prof G Chen	City University of Hong Kong	Department of Electronic Engineering
DP0559398	Prof X FENG	Tsinghua University	Department of Engineering Mechanics
DP0559647	Dr W Ma	Microsoft	Media Computing Group
LE0453398	Prof GC Sih	Chinese Academy of Sciences	Institute for Mechanics
LP0453488	Dr AC West	Save the Children UK	China Programme
LP0455369	Dr X Wei	Kanion Pharmaceutical. Co. Ltd	
LX0211249	Prof J Zhang	The Central Iron and Steel Research Institute, Beijing, China	High Temperature Materials Research
LX0211249	Prof J Wang	Xi'an University of Architecture and Technology	Metallurgical Engineering
LX0240468	Dr J He	Huazhong U of Science & Technology China	Department of Electronics and Information Engineering
LX0242363	Prof J Han	University of Science and Technology Beijing	Materials Science and Engineering
LX0346201	Prof Dr W Xu	Textile Research Center	Wuhan Institute of Science and Technolgy
LX0346201	Prof X Gao	Beijing Institute of Clothing Technology	Materials Engineeing
LX0346249	Prof Z Shi	Chinese Academy of Sciences	Institute of Computing Technology
LX0347471	Prof D Xing	Nanjing University	National Laboratory of Solid State Microstructures
LX0348047	Prof X Wang	Chinese Academy of Sciences	Nanjing Institute of Geology and Palaeontology
LX0348548	Prof Y Gu	Dalian University of Technology	Department of Engineering Mechanics
LX0451750	Prof C Tang	Northeastern University	School of Resources and Civil Engineering
LX0454282	Prof X Xu	Nanjing University	Department of Earth Sciences
LX0454366	Prof Z Hu	Chinese Academy of Sciences	National Laboratory of Materials Sciences, Institute of Metal Research
LX0454381	Prof X Zhang	Nanjing University	Republican Chinese History Research Center
LX0454455	Prof Dr X Gao	Nankai University	Deputy director of the institute New Energy Material Chemistry
LX0454455	Prof Dr J Zhao	The Chinese Academy of Science	Institute of Chemistry

Project	Name	Organisation	Department
LX0455066	Prof XH Liu	Northeastern University	State Key Laboratory of Rolling Technology and Automation
LX0455606	Dr M Lin	Institute of mechanics, CAS	
LX0455717	Prof Z Jiang	Fudan University	Surface Physics Laboratory (National Key Laboratory)
LX0559621	Prof J Cao	Shanghai Institute of Microsystems and Information Technology	
LX0559831	Dr K Yu	South China Sea Institute of Oceanology	Coral Reef and Mangrove Research Group
LX0560166	Dr C Yu	Fudan University	Department of Chemistry
LX0560185	Prof M Xia	Central China Normal University	School of Mathematics and Statistics
LX0560210	Prof H Zhang	Chinese Academy of Sciences	Research Centre for Eco- Environmental Sciences
LX0560210	Prof Z Bai	Chinese Academy of Sciences	Research Centre for Environmental Sciences
LX0561262	Prof K Lu	Chinese Academy of Sciences	Institute of Metal Research
LX0561262	A/Prof Y Shi	Institute of Metal Research, Chinese Academy of Sciences	Shenyang National Laboratory for Materials Science
RN0459895	Dr W Ma	Microsoft	Media Computing Group
SR0563610	Dr Q Deng	Shanghai Jiaotong University	Department of Computer Science and Engineering
SR0563610	Dr JZ Huang	The University of Hong Kong	E-Business Technology Institute
SR0566892	Prof Dr X Xie	China University of Geosciences	Institute of Sedimentary Basin and Mineral Deposits