

Macquarie Arc Conference 2009: SUMMARY PROGRAM

MONDAY 13 APRIL
Registration desk opens at 3pm. Icebreaker session starts at 5.30pm
TUESDAY 14 APRIL — FIELD DAY 1
Introduction: What is the Macquarie Arc? (Dick Glen). One-day trip to northern part Molong Volcanic Belt: Fairbridge Volcanics — Reedy Creek Limestone — Cheesemans Creek Formation and Copper Hill Complex and deposit (courtesy Golden Cross Resources)
WEDNESDAY 15 APRIL — FIELD DAY 2
One-day trip to central part Molong Volcanic Belt: Cargo Volcanics — Bowen Park Limestone — Malachis Hill Formation
THURSDAY 16 APRIL — FORMAL PRESENTATIONS DAY 1
FRIDAY 17 APRIL — FORMAL PRESENTATIONS DAY 2
SATURDAY 18 APRIL — FORMAL PRESENTATIONS DAY 3
SUNDAY 19 APRIL — FORMAL PRESENTATIONS DAY 4
MONDAY 20 APRIL — FIELD DAY 3
One-day trip to southern part Molong Volcanic Belt: Cadia Valley Deposits (courtesy Newcrest Mining Limited) — Angullong Volcanics — Ashburnia Group
TUESDAY 21 APRIL — FIELD DAY 4
One-day trip to Junee–Narromine Volcanic Belt: Nelungaloo Volcanics, Yarrimbah Formation, Northparkes Group — Northparkes Mine (courtesy NPM)
WEDNESDAY 22 APRIL — POST CONFERENCE MINE VISIT
One-day post conference trip to Cowal Mine via Cargo Deposit (courtesy Cowal Gold Mine and Max Rangott)
WEDNESDAY 22 APRIL TO SUNDAY 26 APRIL
Six-day post-conference field trip through Ordovician terranes and granites of the Lachlan Orogen in southern NSW

Macquarie Arc Conference 2009: Program: Presentations, Day 1 **Thursday, 16th April**

8.00am	Registration desk opens	
	Welcome and opening address	
9.00am	Principles	40 <u>CRAWFORD, MIEFFRE & DANYUSHEVSKY</u> Modern intra-oceanic island arcs: a template for the interpretation of ancient volcanic arcs in fold belts
9.40am	Principles	40 <u>ROSENBAUM</u> Tectonic response to anomalous subduction and arc-continent collision
10.20am	Principles	20 <u>CASEY & DEWEY</u> The ophiolite enigma resolved?
10.40am	Discussion — 10 minutes	
10.50am	Morning tea — 20 minutes	
11.10am	Pampean	20 <u>ESCAYOLO & VAN STAAL</u> The age and significance of the Puncoviscana Formation with respect to Neoproterozoic to Cambrian tectonic evolution of the Proto-Andean margin of Gondwana
11.30am	Ross-Delamerian	40 <u>BRADSHAW</u> Ross-Delamerian arc-continent collision in Antarctica and New Zealand with some comparisons with other Austral examples
12.10pm	Tasmanides	20 <u>GLEN</u> The bipolar character of the Tasmanides of eastern Australia
12.30pm	Delamerian	20 <u>FODEN</u> The Delamerian Orogen: the last of the Pan Africans
12:50pm	Lunch — 1 hour	
1.50pm	Delamerian	20 <u>GREENFIELD, MILLS, MUSGRAVE & GILMORE</u> Cambrian arc-continent collision during the Delamerian Orogen — evidence from the Koonenberry Belt, northwest NSW
2.10pm	Delamerian	20 <u>MUSGRAVE & GREENFIELD</u> Transition between the Delamerian and Lachlan orogens: geophysical definition and geodynamic implications
2.30pm	Delamerian	20 <u>GIBSON, MORSE, NAYAK & IRELAND</u> Arc-continent collision and terrane accretion in western Tasmanides: insights from basement studies along Australia's southern rift margin
2.50pm	Delamerian-Lachlan	20 <u>CAYLEY</u> Exotic crustal block accretion to the eastern Gondwana margin in the Late Cambrian — Tasmania, the Selwyn Block, and implications for the Cambrian-Silurian evolution of the Ross, Delamerian and Lachlan orogens
3.10pm	Discussion — 10 minutes	
3:20pm	Afternoon tea — 20 minutes	
3.40pm	Macquarie Arc	20 <u>CRAWFORD, MIEFFRE, SQUIRE, BARRON & FALLOON</u> Ordovician magmatic evolution of the Macquarie Arc, NSW
4.00pm	Macquarie Arc	20 <u>SIMPSON</u> Recognition of volcanic centres in ancient island arc systems: examples from the Ordovician Macquarie Arc, NSW, Australia
4.20pm	Macquarie Arc	20 <u>SAEED, GLEN, QUINN, BELOUSOVA & GRIFFIN</u> Basement to the Ordovician Macquarie Arc, Lachlan Orogen, NSW: constraints from zircon data
4.40pm	Macquarie Arc	20 <u>QUINN & GLEN</u> A new supra-subduction zone rift model for the eastern Lachlan Orogen, south-eastern Australia: implications of intimately related siliciclastic turbidite and volcanic packages
5.00pm	Macquarie Arc	20 <u>FORSTER & DOWNES</u> Lead isotope systematics of Ordovician to Early Silurian porphyry and skarn deposits
5.20pm	Macquarie Arc	20 <u>KEMP & BLEVIN</u> Evolution of Macquarie Arc magmas from Hf-O isotope and trace element systematics of zircon: tectonic and metallogenic implications
5.40pm	Discussion and refreshments	
	Dinner	

Macquarie Arc Conference 2009: Program: Presentations, Day 2 **Friday, 17th April**

8.00am		Registration desk opens	
8.30am	Macquarie Arc mineralisation	40 <u>COOKE, HARRIS & ZUKOWSKI</u>	Gold and copper deposits of the Macquarie Arc, NSW
9.10am	Macquarie Arc mineralisation	20 <u>FOX, HARRIS, COOKE, COLLETT & FAURE</u>	Controls on the formation of the Cadia East alkalic porphyry Au–Cu deposit NSW: potential reactivation of early basin structures
9.30am	Macquarie Arc mineralisation	20 <u>HARRIS, PERCIVAL, ALLEN, COOKE, TOSDAL, MCMILLAN, DUNHAM & COLLETT</u>	Inverted submarine basins hosting the Cadia Valley porphyry ore deposits, NSW: fundamental controls on system architecture
9.50am	Macquarie Arc mineralisation	20 <u>WASHBURN GROOM, HARRIS & TOSDAL</u>	Architecture of the Silurian sedimentary cover sequence in the Cadia porphyry Au–Cu district, NSW, Australia: implications for post-mineral deformation
10.10am	Macquarie Arc mineralisation	20 <u>DAVID, BURRELL & COLANIZ</u>	Geology of the Copper Hill porphyry deposit
10.30am			Discussion — 10 minutes
10.40am		Morning tea — 20 minutes	
11.00am	Tasmanides	40 <u>COLLINS</u>	Petrological/geochemical tracking of geodynamic process: the Tasmanide retreating orogenic system, eastern Australia
11.40am	Lachlan Orogen	20 <u>WYBORN & WILLIAMS</u>	Metamorphics from Geehi Gorge, Upper Indi and Bethanga and the enigma of anomalously high geothermal gradients in the Lachlan Orogen
12.00pm	Lachlan Orogen	20 <u>LENNOX</u>	Understanding the Wyangala Batholith, eastern Lachlan Fold Belt
12.20pm		Lunch — 1 hour	
1.20pm	New England Orogen	20 <u>PHILLIPS & OFFLER</u>	Source and transportation of high-pressure exotic blocks in serpentinite mélange, Peel–Manning Fault System, southern New England Fold Belt
1.40pm	New England Orogen	20 <u>MURRAY & OFFLER</u>	Unravelling the tectonic setting of Devonian sequences in the New England Orogen
2.00pm	New England Orogen	20 <u>PISAREVSY, CAWOOD, LEITCH & NEMCHIN</u>	New England Orocline in the Late Paleozoic: geological and paleomagnetic constraints
2.20pm	Palaeo-geographic linkages	20 <u>PERCIVAL</u>	Palaeontological and palaeogeographical aspects of the Macquarie Arc
2.40pm		20 <u>TAIT</u>	Palaeozoic palaeogeography: the Variscan, Alpine and Lachlan fold belts
3.00pm			Discussion — 10 minutes
3:10pm		Afternoon tea — 20 minutes	
3.30pm	Palaeo-geographic linkages	20 <u>MURPHY</u>	The conundrum of Pangea: a genetic linkage between the Appalachian and Terra Australis orogens?
3.50pm	Principles	40 <u>CLIFT</u>	The relative roles of arc magmatism, arc accretion and tectonic subduction erosion in balancing the mass of continental crust
4.30pm			Discussion and refreshments
			Dinner

Macquarie Arc Conference 2009: Program: Presentations, Day 3 **Saturday, 18th April**

8.00am		Registration desk opens	
8.30am	Caledonides	40 <u>DEWEY, MANGE & RYAN</u>	Ordovician arc–continent collision in the Appalachian/Caledonian Orogen
9.10am	Caledonides	20 <u>RYAN</u>	Fast-track Barrovian metamorphism, arc–continent collision and Connemara
9.30am	Caledonides	20 <u>DRAUT, CLIFT, AMATO, BLUSZTAJN & SCHOUTEN</u>	Arc–continent collision and the formation of continental crust: geochemical and isotopic records from the Irish Caledonides
9.50am	Americas	20 <u>OLIVEIRA</u>	Arc–continent collision in the Palaeoproterozoic Rio Itapicuru Greenstone Belt, São Francisco Craton, Brazil
10.10am			Discussion — 10 minutes
10.20am		Morning tea — 20 minutes	
10.40am	Americas	40 <u>VAN STAAL & ZAGOREVSKI</u>	Arc development, VMS mineralization and collisional tectonics in the northern Appalachians
11.20am	Americas	20 <u>ROJAS-AGRAMONTE, GARCÍA-CASCO, KRÖNER, CARRASQUILLA-ORTIZ, ITURRALDE-VINENT & MILLÁN-TRUJILLO</u>	The Mabujina Amphibolite conundrum (central Cuba): a case of metamorphosed root zone of an island arc, or an exotic pre-arc basement?
11.40pm	Americas	20 <u>DALZIEL</u>	Mesozoic ‘Rocas Verdes’ marginal basin, southernmost Andes: tectonic settings and implications for interpretations of older arc–back arc systems
12.00pm	Urals	20 <u>PUCHKOV</u>	Chronology and geometry of arc–continent collisions
12:20pm		Lunch — 1 hour	
1.20pm	Urals	40 <u>BROWN</u>	Arc–continent collision in the southern Urals: insights into the growth and destruction of the continental crust
2.00pm	Urals	40 <u>HERRINGTON & ROBERTS</u>	Formation of VMS deposits in oceanic arcs: are some linked to arrested subduction resulting from arc–continent collision?
2.40pm			Discussion — 10 minutes
2:50pm		Afternoon tea — 20 minutes	
3.10pm	Cordillera	40 <u>TOSDAL, MORTENSEN, HARRIS, BISSIG & HART</u>	Construction of an alkalic porphyry Au–Cu province in British Columbia: Triassic and Early Jurassic magmatism, amalgamation, and accretion of offshore island arcs to North America
3.50pm	Cordillera	40 <u>GOLDFARB</u>	Orogenic gold in the Cordilleran Accretionary Orogen of western North America: changing stresses in the fore-arc and back-arc
4.30pm			Discussion and refreshments
			Dinner

Macquarie Arc Conference 2009: Program: Presentations, Day 4 **Sunday, 19th April**

8.00am	Registration desk opens		
8.40am	New Guinea	40	<u>DAVIES</u> Geology of New Guinea
9.20am	New Guinea	40	<u>CLOOS</u> Arc-continent collision followed by lithospheric delamination in New Guinea: implications for magma generation and Cu–Au mineralization
10.00am	New Guinea	20	<u>CORBETT</u> Tectonic/structural control to Papua New Guinea Au–Cu mineralisation
10.20am	Discussion — 10 minutes		
10.30am	Morning tea — 20 minutes		
10.50am	Asia	20	<u>HERRINGTON</u> , <u>SCOTNEY</u> , <u>ROBERTS</u> , <u>BOYCE</u> & <u>HARRISON</u> Isotopic evidence for progressive magma contamination in arc volcanism during arc-continent collision and the temporal association with massive sulphide deposits on Wetar Island (Banda Arc)
11.10am	Asia	20	<u>ALVAREZ-MARRON</u> , <u>BROWN</u> , <u>SCHIMMEL</u> & <u>Y-M WU</u> Deformation of the continental crust in Taiwan arc–continent collision: structure and seismic energy release
11.30am	Asia	20	<u>SCHOLL</u> Tectonic consequences of the end-on collision of an intra-oceanic arc with a continent — the example of the orthogonal plunge of the Aleutian arc into the Kamchatka subduction zone
11.50pm	Australia	20	<u>KORSCH</u> , <u>KOSITCIN</u> , & <u>CHAMPION</u> Australian island arcs through time: geodynamic implications in the Archaean and Proterozoic
12.10pm	Africa	20	<u>DE WAELE</u> , <u>HORSTWOOD</u> , <u>PITFIELD</u> , <u>THOMAS</u> , <u>KEY</u> , <u>RABARIMANA</u> , <u>RAFAHATELO</u> , <u>RALISON</u> & <u>RANDRIAMANANJARA</u> The architecture of the “Betsimisaraka Suture Zone”; a record of oceanic arcs and associated metasedimentary successions between the “Indian” and “African” parts of Madagascar
12.30pm	Lunch — 1 hour		
1.30pm	Asia	20	<u>WALSHE</u> Links between Earth degassing and Late Ordovician Cu–Au metallogenesis in the Macquarie Arc, eastern Lachlan Orogen, NSW
1.50pm	Asia	20	<u>BARNICOAT</u> Arcs, magmas and ore-forming fluids
2.10pm	Asia	20	<u>WILLIAMS</u> & <u>WYBORN</u> Is the theory of plate tectonics an impediment to successful mineral exploration?
2.30pm	Asia	20	<u>GOLDFARB</u> & <u>HART</u> Gold in Asia: accreted Paleo-Tethyan arcs and deformed continental margins
2.50pm	Discussion — 10 minutes		
3:00pm	Afternoon tea — 20 minutes		
3.20pm	Central Asian Orogenic Belt	40	<u>KRÖNER</u> , <u>DEMOUX</u> , <u>ALEXEIEV</u> , <u>ROJAS-AGRAMONTE</u> , <u>WINDLEY</u> & <u>JIAN</u> The Central Asian Orogenic Belt: what can we learn from field-related geochronological studies?
4.00pm	Central Asian Orogenic Belt	40	<u>XIAO</u> Late Permian to mid-Triassic continent–arc collision in the Tien Shan: implications for the architecture of central Asia
4.40pm	Central Asian Orogenic Belt	20	<u>WAINWRIGHT</u> , <u>TOSDAL</u> , <u>FORSTER</u> , <u>KIRWIN</u> , <u>LEWIS</u> & <u>WOODEN</u> The Devonian and Carboniferous arc in the Oyu Tolgoi area of the Central Asian Orogenic Belt, southern Mongolia
5.00pm	Discussion, refreshments and meeting close		
	Dinner		

CONFERENCE SOCIAL FUNCTIONS

(All meals are included in the conference fee)

Monday, 13th April

Welcome Icebreaker (BBQ) at Turners Vineyard

Wednesday, 15th April

Dinner at *Sisters Rock* restaurant, Borrodell Winery and Orchard

Remaining meals will be held in the Lucknow Valley Room at Turners Vineyard

Tuesday, 14th April

Thursday, 16th April

Friday, 17th April

Saturday, 18th April **Conference Dinner**

Sunday, 19th April **End of talks dinner**

Monday, 20th April

Tuesday, 21st April

Please check the daily program on the noticeboard for meal times and any other changes.