ACTER 2017 Field Symposium on

Tectonics of the Lachlan fold belt and granite petrogenesis

23-29 October, 2017

Leader: Professor WJ Collins (Curtin University)

Second Circular (May 2017)

Introduction

Welcome to the second circular of the ACTER 2017 Field Symposium. In this document you will find information regarding the schedule of the symposium along with the details for registration to the event. All participants will be accommodated by one bus and registration will be accepted on a first come – first served basis. Early registration is therefore vital to secure a place.

Registration is now open for the symposium is but be quick as there are only 50 places available. Registration will close on 1st October 2017 (unless sold out prior).

<u>Please Note:</u> There are a number of options available during registration relating to the desired accommodation, a single/separate room or twin/shared room. There is also the option to include 2 nights of accommodation at the Holiday Inn – Sydney International Airport. The two nights included would be Sunday 22 October and Sunday 29 October, i.e. the night before the symposium begins and the night of our return to Sydney.

If you require accommodation for additional nights, please make your own arrangement. Link to the Holiday Inn – Sydney Airport.

<u>Important:</u> The ACTER 2017 Field Symposium bus will depart from the Holiday Inn early in the morning of 23 October 2017 and return to the same place in the evening of 29 October 2017. If you decide to stay elsewhere you will need to make arrangements to be sure that you arrive at the Holiday Inn early on the morning of departure.

Please use the following link to proceed to **REGISTRATION**.

Getting to and from the airport

There is an airport shuttle that operates between the airport and the Holiday Inn. Cost is \$6 per person. The shuttle returns every 30-45 minutes between 5:30AM and 10:55PM.

Alternatively the hotel is only 5km from the airport and Taxi fare should be quite reasonable (about \$20 from the international terminal).

SYMPOSIUM SCHEDULE

DAY 1 - (Mon. 23 October) SYDNEY - KATOOMBA

Morning: Travel to Katoomba. Lunch.

Afternoon: Introductory session on Tectonic evolution of the Lachlan Fold Belt and other themes.

Late Afternoon: Echo Point Lookout.

O/Night Katoomba

DAY 2 - (Tue. 24 October) KATOOMBA – ORANGE

Tectonic elements: Ordovician Macquarie Arc, Late Silurian rift basin, Carboniferous rear arc, Miocene intraplate volcanism

2.1 Bathurst Granite: Late Paleozoic rear arc chain	Carboniferous
2.2 Sofala Volcanics: eastern Macquarie Arc	Ordovician
2.3 Turondale Formation: Hill End Trough	Early Devonian
2.4 Wallaby rocks: Chesleigh Group, Hill End Trough	Late Silurian
2.5 Canobolas volcano: Intraplate magmatism	Miocene

O/Night Orange

Day 3 - (Wed. 25 October) ORANGE – YASS

Tectonic elements: Macquarie arc, Early-Late Silurian rift basins/S-type granites and volcanics, Tabarabberan mylonites, Miocene volcano

3.1. Cargo Volcanics: central Macquarie Arc	Middle-Late Ordovician
3.2 Bowen Park Limestone and Malichis Hill Formation	Late Ordovician
3.3 Canowindra Fossil Museum (lunch).3.4 Cowra Granite: rift magmatism in Cowra Trough	Middle Silurian
3.5 Wyangala Batholith: S-type granite	Middle Silurian
3.6 Wyangala Granite: protomylonite	Late Devonian
3.7 Douro Group (Laidlaw volcanics)	Middle Silurian
3.8 Hatton Corner Group (optional)	Late Silurian-Early Devonian

O/Night Yass.

DAY 4 - (Thu. 26 October) YASS-COOMA

Tectonic elements: Tectonic switching at 435-430 Ma. High-T, low-P metamorphism at the base of the S-type Murrumbigee Batholith. S- and I-type granites and volcanics

4.1 Murrumbidgee Group: shallow marine carbonates	Early Devonian
4.2 Mt Ainslie, Canberra: S-type volcanics	Middle Silurian
4.3 Benambran unconformity, State Circle Canberra	Early Silurian

4.4 Kosciuszko Batholith (I- and S-type granites) Middle Silurian-Early Devonian

4.5 Cooma Complex: Spring Creek metatexite
 4.6 Cooma Complex: Soho Street diatexite
 4.7 Cooma Granite (magma segregation from diatexite)
 Early Silurian
 Middle Silurian

O/Night Cooma

DAY 5 - (Fri. 27 October) COOMA-EDEN

Tectonic elements: Supersuites of the I-type Bega Batholith. Migmatites and emplacement mechanisms at the base of an I-type batholith. A-type granites and rhyolites

5.1 Glenbog Supersuite (I-type)	Early Devonian
5.2 Kameruka Supersuite and related rocks (Wog Wog River traverse)	Early Devonian
5.3 Watergums pluton (A-type)	Late Devonian
5.4 Eden Rhyolite	Late Devonian

O/Night Eden

DAY 6 - (Sat. 28 October) EDEN-TUROSS

Tectonic elements: Cambrian cherts, Ordovician turbidites, Benambran deformation, Middle Devonian rifting, A-type granites, Late Devonian fluviatile sedimentation

6.1 Merimbula Group: fluviatile (Redbed) sequence	Late Devonian
6.2 Adaminaby Group, Bermagui: multiply folded turbidites	Middle-Late Ordovician
6.3 Tuross pluton, Bingie Point: magma chamber processes	Middle Devonian
6.4 Grey Rocks Headland: magma chamber processes	Middle Devonian

O/night Tuross Beach caravan park

DAY 7 - (Sun. 29 October) TUROSS-SYDNEY

Tectonic elements: Ordovician subduction accretion (?) complex, magma chamber dynamics in a mafic-silicic layered intrusion (Bega Batholith), base of Sydney Basin

7.1 Melville Point: chert-turbidite transition
 7.2 Guerilla Point: accretionary prism melange?
 7.3 Myrtle Beach unconformity: base of Sydney Basin

Cambro-Ordovician?
Permian

7.4 Gerringong Volcanics (optional)

Triassic

Return Sydney (evening)

Any questions or special requests should be directed to either <u>Dr Weihua Yao</u> or <u>Dr Josh Beardmore</u>.