

# ASC 2016 11<sup>th</sup> Asian Seismological Commission General Assembly

## 25-27 November, 2016

Melbourne Convention & Exhibition Centre

Melbourne, Victoria, Australia



ASIAN SEISMOLOGICAL COMMISSION



## WELCOME

ASC President, Gary Gibson, and the ASC Local Organising Committee look forward to welcoming you to Melbourne, Victoria, Australia to attend the 2016 11<sup>th</sup> Asian Seismological Commission General Assembly. The conference will be held at the state of the art Melbourne Convention & Exhibition Centre over three full days, concluding with a gala conference dinner on the Sunday evening.

The main three day scientific program and meetings of the ASC bureau and working groups, will be held between 25-27 November commencing at 8am on the Friday. A workshop on Seismological Contributions to Earthquake Risk Mitigation, and a meeting of Australian seismologists will be held on November 24.

All full ASC2016 registrations include the welcome reception on Friday and our conference dinner on the Sunday evening.

For delegates who would like to extend their stay, we offer a choice of two 2-day post-conference tours to explore either the recent earthquake faulting and geologically recent volcanoes west of Melbourne, or the earthquake prone region east of Melbourne. Such tours are ideal for developing your seismological network. Both tours return to Melbourne by 5pm on 29 November, and most flights leaving for Asia depart in the evening so accommodation for that night may not be needed depending on your flight time.

The Australian Earthquake Engineering Conference is being held concurrently with the ASC conference and ASC delegates are welcome to attend AEES sessions of their choice by selecting this option on the registration form. ASC delegates are also welcome to attend the AEES conference dinner on the Saturday evening at Crown Casino.

## PROGRAM

We have received over 100 abstracts for the ASC and the seismological aspects of the concurrent AEES conference. The preliminary program on the next page shows the main sessions for the three days. These papers include topics within the two workshop sessions on earthquake geology and on magnitude scales.

Amongst our confirmed speakers we will have presentations by **Kenji Satake**, Professor-Earthquake Research Institute, The University of Tokyo, Japan; **Brian Kennett**, Emeritus Professor of Seismology-Research School of Earth Sciences, The Australian National University; **Toshiaki Yokoi**, Director of IISEE, Tsukuba, Japan, and **Paul Somerville**, Chief Geoscientist-Risk Frontiers, NSW, Australia.

**Posters** - The conference venue has a large open space overlooking the city which will be used for posters, exhibitions and catering. An oral paper provides a captive audience for a limited time, with limited opportunity for discussions or questions, while a poster presentation allows plenty of time for discussion with individuals or small groups during tea breaks and lunch. If you are presenting on oral paper and wish to include a poster on the topic, please advise the committee before October 25.

If you have not submitted an abstract for an oral presentation but would like to give a poster presentation, or you have an oral paper but also have another topic suitable for a poster, please submit an abstract for a poster. Although most of the oral sessions are now full, it is possible that some time slots may become available for poster presenters.

**Publication** - All abstracts will be listed in the program guide. A USB will be provided on registration that includes all abstracts, and optionally a PDF of the full paper of each oral or poster presentation, or a PDF of the actual presentation or of the poster itself. These must be submitted by October 31 to be included on the conference USB. Following the practice of AEES conferences, these will be available on the internet (see [aees.org.au](http://aees.org.au), under the Downloads tab), on the [asc2016.asia](http://asc2016.asia) web site. If submitted during the conference these will be posted on the internet, but will not be included on the conference USB.

# PROVISIONAL PROGRAM - ASC 2016, AEES

ASC 2016	Joint Sessions	AEES 2016
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<b>Friday 25 November 2016</b>		
ASC Welcome and Opening		
GEODYNAMICS 1 Brian Kennett		
Morning Tea		
GEODYNAMICS 2		
Lunch		
GEODYNAMICS 3	OUTREACH 1	AEES Welcome
		INNOVATIVE STRUCTURES
Afternoon Tea		
VOLCANO SEISMOLOGY	CONCRETE STRUCTURES	AUSTRALIAN HAZARD MAP
Joint Welcome Reception, MCEC Foyer		

Saturday 26 November 2016		
RECENT EARTHQUAKES Kumamoto, Japan, 16 April 2016 Mw7.1, Petermann Ranges, Australia, 20 May 2016 Mw6.1, Hayman Island, Australia, 18 August 2016, Mwp5.8.		
Morning Tea		
HAZARD – KEY ISSUES, Paul Somerville, Dmitry Storchak		
HAZARD – SEISMICITY	HAZARD - FRAGILITY AND DAMAGE	
Lunch		
HAZARD – GROUND MOTION	HAZARD - PSHA	
Afternoon Tea		
HAZARD - SEISMOLOGY	HAZARD – SITE RESPONSE	
		AEES Dinner

Sunday 27 November 2016		
OBSERVATION 1	OUTREACH 2	AUSTRALIAN HAZARD MAP
Morning Tea		
OBSERVATION 2	EARTHQUAKE GEOLOGY WORKSHOP	MASONRY BUILDINGS
Lunch		
MAGNITUDE WORKSHOP 1	HAZARD - PSHA	AEES concluded
Afternoon Tea		
MAGNITUDE WORKSHOP 2	HAZARD - SEISMOLOGY	
ASC Dinner		

# SOCIAL EVENTS

## Friday 25 November – Welcome Reception



A great way for ASC delegates and AEES delegates alike to meet up and get to know each other at this cocktail function at the conference venue. Included in all full registrations.

## Saturday 26 November – AEES Conference Dinner



With no official ASC functions planned for the Saturday night, you may like to join AEES conference delegates for dinner at Mr Hive Kitchen & Bar. The restaurant is part of the Crown Entertainment Complex so you might like to try your luck at the tables after dinner! This is an optional extra to select on the registration form.

## Sunday 27 November – ASC Conference Dinner



Join us at the completion of the conference at the famous Melbourne Cricket Ground (MCG) for our dinner in the Members Dining Room. Included in all full registrations. Set in the heart of the Melbourne Cricket Club member's reserve, the Members Dining Room is a prestigious venue saturated in the tradition and grandeur of the MCC, with views of both the CBD and the hallowed turf. A Sheffield Shield cricket game will be in progress also for you to view whilst dining on seasonal, fresh, sustainable food using the best local produce. Our desserts will be prepared by Australia's best pastry chef, Deniz Karaca. If you are keen to explore the MCG further, arrive early and take a guided tour of the MCG and National Sports Museum.

# OPTIONAL TOURS

## Mon 28 - Tue 29 November – Volcanoes and Earthquakes of Western Victoria



Depart Melbourne CBD hotels & travel west over volcanic plains to Bacchus Marsh, then over the Rowsley Fault (the most active fault in Western Victoria) to Ballan & Creswick for morning tea. After viewing the diverse range of volcanoes in this region including the historic Deep Lead gold mining area, we travel south through Ballarat to Colac for lunch. An afternoon drive through the main volcanic belt including the Stony Rises, volcanoes & maars at Camperdown and Terang to Tower Hill, concluding at Warrnambool, the site of Victoria's most damaging two earthquakes in 1903, for dinner and overnight accommodation.

Depart Warrnambool and travel along the Great Ocean Road and witness the rugged splendour of the famous 12 Apostles off the shore of the Port Campbell National Park. These eight massive limestone stacks (five have fallen since their discovery), rise up majestically 45 metres from the Southern Ocean and are surrounded by majestic cliffs. Twelve Apostles walking tour – Visit to Apostle Whey Cheese. Guided tour & lunch at the Otway Ranges Treetop Walk – A 600 metre long 25 metre high elevated tree top walk ascending at a gentle grade through a magnificent stand of cool temperature rainforest featuring Myrtle Beech, Blackwood and Mountain Ash. The pinnacle of the treetop walk is the 47 metre high lookout which is ascended via a spiral stairway through the understorey to emerge amongst the crowns of the giants of the forest. Drive along the spectacular Great Ocean Road through Lorne and Anglesea to Geelong, passing over the Lovely Banks Fault, and return to Melbourne CBD hotels. This tour includes bus transfers, a guided tour of the Otway Fly, lunches, the walking tour of the 12 Apostles, dinner and overnight accommodation and breakfast in Warrnambool. It will depart on Monday 28 November at 8am and return to Melbourne on Tuesday 29 November at 5pm. Cost: \$370 per person. Partners/Family very welcome.



## Mon 28 & Tue 29 November – Visit Australia's earthquake prone region east of Melbourne



Depart Melbourne CBD hotels – Morning Tea at San Remo – Tour of Antarctic Journey – Lunch in Cowes – Churchill Island Tour – Visit to Koala Sanctuary – Dinner & overnight accommodation on Phillip Island – Penguin Tour – Breakfast – Nobbies Board Walk & Seal Cruise – Lunch – return to Melbourne. The route passes over some of the major faults of the Strzelecki Ranges, the most active earthquake region in Australia during the current tectonic stress setting. Join us as we explore the areas of Gippsland and Phillip Island. Be engaged by a hands-on interactive experience at Antarctic Journey. Visit Churchill Island Heritage Farm which holds an important place in the history of European settlement in Victoria and provides a glimpse into the past lives of early Australian settlers and past farming practices. The site of the first European agricultural pursuits in Victoria, the island has been farmed since the 1850's. The tiny island farm of 57 hectares boasts significant natural and cultural values with world-class wetlands, ancient Moonah trees, heritage gardens and historic buildings. This tour also gives you the opportunity to get up close to our native Koalas in their natural bush environment. Plus we will stroll along The Nobbies boardwalk, view the amazing blowhole, a spectacular sea cave that thunders during big southern swells, and enjoy spectacular views along the Island's rugged south coast. This tour includes bus transfers, overnight accommodation, and breakfast. Cost: \$490 per person. Partners/Family very welcome.

## TRAVEL

### By Air

If joining us from interstate or overseas, fly into Tullamarine or Avalon airport (Jetstar flies to both Tullamarine and Avalon). Travel time from Tullamarine airport to Melbourne CBD is approximately 30 minutes and from Avalon airport approximately 50 minutes. An airport shuttle service operates from both airports.

### By Hire Car from Tullamarine Airport

There are five onsite rental companies (Avis, Budget, Europcar, Hertz, Thrifty & Redspot) who all have information desks in the Airport's domestic terminals and offices located on the ground floor of the carpark. If arriving from overseas, an international driver's licence will be required.

### By Public transport from Tullamarine Airport

Skybus offers transport to/from Melbourne CBD and operates 24/7, running every 10 minutes. Cost is \$19 per adult one way or \$38 round trip. Children are cheaper. Tickets can be purchased on arrival at the bus stop or online at [www.skybus.com.au/fares](http://www.skybus.com.au/fares). On arrival at Southern Cross Station in the CBD, SkyBus provides a complimentary hotel transfer service during 6am-10.30pm Monday to Friday and between 7am and 7pm on Saturday and Sunday.

### By Taxi from Tullamarine Airport

Taxi ranks are located on the ground floor outside Terminals 1 and between Terminal 2 and 3. They are also located on the ground floor of the transport hub outside Terminal 4. Fares are based on distance, location and time of travel but from the airport to Melbourne CBD should cost between \$55 and \$65.

### Transport from Avalon Airport

Avalon Airport is located off the Princes Highway (M1) approximately 50 minutes from Melbourne CBD. Car rentals are available from Avalon airport. Taxi fare from Avalon to Melbourne will be between \$100 - \$130. Sita Coaches operate an airport bus service between Avalon Airport and Southern Cross Station in Melbourne's CBD. Cost is \$22 one way.

The MCEC conference centre is located on the Yarra River in the southwest corner of the Melbourne CBD, within easy walking distance of the Southern Cross railway station, and with easy access by trams.

# ACCOMMODATION

A limited number of rooms are available at the properties shown on the following page for the dates **IN Thursday 24 Nov OUT Mon 28 Nov**. These rooms need to be booked via the online registration form from [www.asc2016.asia](http://www.asc2016.asia) – *Our room block can only be held until the 15<sup>th</sup> of September* so please do book quickly. Once the accommodation block is full or released, delegates will need to arrange their own accommodation. Demand for hotel rooms in Melbourne in November is extremely high so book early to avoid high rates.



## Pensione Melbourne

The Pensione Melbourne offers single and double bed rooms, or if you are sharing, there are twin and trio single bed rooms available.

### Rates (IN Thursday 24 Nov OUT Mon 28 Nov)

Single bed (incl. bfast for 1)	\$770.00
Double bed (incl. bfast for 1)	\$820.00
Twin (2 singles zipped as a King bed) (incl. bfast for 1)	\$820.00
Trio singles (3 singles or a zipped King & single) (incl. bfast for 2)	\$970.00



## Hilton South Wharf

The Hilton South Wharf has direct access to the Melbourne Convention and Exhibition Centre so just a very short walk from hotel room to conference room. They offer Queen and twin share rooms, and rates include a buffet breakfast. Wi-Fi is available for \$20 per 24 hours.

### Rates (IN Thursday 24 Nov OUT Mon 28 Nov)

Queen bed (one person)	\$1340.00
Queen bed (two people)	\$1430.00
Twin beds (one person)	\$1340.00
Twin beds (two people)	\$1430.00