

WELCOME

Dear AWPP-2016 Delegates

Welcome to Melbourne, Australia and the Asian Workshop on Polymer Processing (AWPP 2016). As Chairs of the workshop, we represent a large group of committee members that have worked hard to make the workshop possible. We acknowledge the executives of the Australian Society of Rheology (ASR) who have under-written the workshop, our stream chairs that have helped to bring together a very strong technical program and to Tulips Meetings Management, our workshop organiser group, who have worked tirelessly behind the scenes.

The philosophy of the workshop has been to have as few parallel streams as possible in the technical program to allow exposure of each session to as many delegates as possible. The Workshop has tried to bring as much industry participation as possible since AWPP aims to enhance interactions between Academia and Industry. We are honoured to have six excellent plenary speakers and a large range of keynote speakers. We are also delighted to be able to honour Professor Sati Bhattacharya with a special symposium within the technical program. It is fitting to acknowledge a lifetime of achievement in trying to understand "Processing and Rheology" and its eye-catching applications.

It has been more than 15 years since the Asian Workshop on Polymer Processing (AWPP) was first held in Bangkok, Thailand back in 2001. Since then, Asia has become the production base of plastic materials and plastic products distributed all over the world. Therefore, it is important to set up an international workshop in the Asia-Pacific which provides an opportunity to exchange technology and information in the field of plastic materials and plastic products. Previous AWPPs have successfully contributed to technology exchanges and built up a network of connections between industry and academia, by creating the opportunity for researchers and engineers from across Asia to gather in a single place. Newly developed technologies which can support leading-edge industries are of great interest to all participants. The workshop will help industry, researchers and engineers communicate with each other, give useful information and create the chance for cooperative research for all the attendees. It is interesting to note that we have delegates from 19 countries and more than two thirds are from outside of Australia. This diversity of involvement is clearly outside of just Austral-Asia. We are delighted that many people have elected to spend quite a bit of time on an airplane to join the workshop in Melbourne, Australia

It is difficult to run a workshop of this scale these days without sponsorship and we acknowledge all the sponsors of the event. In particular, we acknowledge the ASR, Qenos, RMIT, CSIRO and Zest for their significant cash and in-kind contributions. To our other sponsors and exhibitors, thank you for helping to make the workshop possible and making it affordable for our graduate and younger polymer processing/rheologists in Australia. It is critical that they have forums such as this to test their knowledge and receive feedback on their work.

We hope you have a wonderful week in Melbourne. Please take the time to establish new collaborations in polymer processing, rheology, emerging new trends and renew old acquaintances, sample the food and wine and enjoy the beautiful city.

Predrag Micic (Qenos, Australia) Chair and Rahul Gupta (RMIT University), Co-Chair, AWPP 2016

Committees

Organising Committee

Dr. Predrag Micic, Chair, Qenos
Dr. Rahul Gupta, Co-Chair, RMIT University
Prof. Sati Bhattacharya, RMIT University
Dr. Mike O'Shea, CSIRO
Dr. Franco Costa, Autodesk Pty. Ltd.
Prof. Qipeng Guo, Deakin University
Professor Russell Varley, Deakin University

Technical Advisory Committee

Dr. Rahul Gupta, RMIT University
Assoc. Professor Nhol Kao, RMIT University
Dr. Muthu Pannirselvam, RMIT University
Assoc. Professor Igor Sbarski, Swinburne University
Assoc. Professor Xuehua Zhang, RMIT University
Prof. Peter Halley, University of Queensland

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www.philmac.com.au or call 1800 755 899.

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General Information

Abstracts

Abstracts are contained within this booklet and are also available on the conference website

Accommodation

Rydges on Swanston, 701 Swanston St, Carlton VIC 3053

Phone: +61 3 9347 7811

Ibis Melbourne Swanston Street, 609 Swanston Street, Carlton VIC 3053

Phone: +61 3 8341 4777

Airport Transfers

Melbourne Airport (Tullamarine) is 25km north of the city on the Tullamarine Freeway. It has both international and domestic terminals in close proximity, making transfers easy.

How to get from Melbourne Airport to Melbourne City Centre

Bus Transfers: Skybus transfers to/from the airport will cost approximately \$19. Simply purchase your ticket then board SkyBus express from Melbourne Airport (Tullamarine) to Southern Cross Station. On arrival at Southern Cross Station, check in to the City Hotel Shuttle booth and they will allocate you to a mini-bus who will take you to your hotel door. For your return, ask your concierge to call SkyBus during their operating hours on +(61 3) 9600 1711 (quoting your room number) to reserve a pick-up time for the SkyBus Free City Hotel Shuttle. You will be taken to their city terminal at Southern Cross Station to board an express SkyBus to Melbourne Airport (Tullamarine).

Taxi: Melbourne's taxis are a safe and convenient way to get from the airport to your destination. Taxi ranks are located on the ground floor outside Terminals 1 and 3. You can catch a taxi from designated taxi ranks. Taxi fares are calculated according to the distance and duration of the journey, and will vary based on the number of people and time of travel. Additional charges apply if you travel on some public holidays, late at night, travel with five or more people or pay with credit or debit card. Estimated cost to CBD: AUD\$50-\$60

Awards

AWPP is awarding a 1st and 2nd poster prize to students to encourage participation and to recognize excellence. The recipients will be determined based on the scientific content and quality of presentation. The winners will be announced at the Conference Banquet on Tuesday 8 November. The Best Poster award is sponsored by LG Hausys and ASR.

Banks and Automatic Teller Machines (ATMs)

Banks are open from 0930 to 1600 Monday to Thursday and 0930 to 1700 on Fridays. Banks are closed all day Saturday and Sunday. Exchange facilities are available at the airport and most major hotels. Automatic teller (ATMs) facilities are available at a wide variety of outlets.

Please ask at your hotel's reception if you require information on the location of banks and ATMs.

Decimal currency is used in Australia - units are dollars and cents. All major credit cards are widely accepted in Australia. Visit www.xe.com for current exchange rates.

Certificates of attendance

A certificate of attendance will be emailed to you after the Conference.

Catering

Morning tea, lunch and afternoon tea will be available during the Conference in the exhibition area (located in the foyer) and is included in your registration fee.

Workshop Venue

The conference is being held on Level 4 of the Rydges on Swanston Hotel, 701 Swanston Street, Carlton, VIC 3053.

Dietary requirements

If you have not already provided details of any special diet, special needs or disability assistance required, please notify the staff at the registration desk.

Disclaimer

In the event of industrial disruption the meeting organisers cannot be held responsible for any losses incurred by delegates. The program is correct at the time of printing; however the organisers reserve the right to alter the program, if and as is deemed necessary.

Dress codes

Welcome reception

Business attire / Smart Dress

Conference dinner

Business attire / Smart Dress

Duplication/recording

Unauthorised photography, audio taping, video recording, digital taping or any other form of duplication is strictly prohibited in Conference sessions. If you would like copies of presentations, please approach the presenter with your request.

Electricity

The electrical supply is 240 volts, 50Hz. The connection for appliances is a flat 3-pin plug of unique design. Most hotels provide 110 volt outlets for shavers.

Emergency details

In an emergency telephone 000 for Ambulance, Fire Service or Police.

Exhibition

The Conference exhibition will be located on in the Skyline Lounge on the 4th floor of the Rydges on Swanston Hotel.

Insurance

The Conference does not provide insurance to delegates. We strongly recommend that you take out insurance policies to cover medical and travel expenses. If necessary, consult your travel agent.

Internet and Wi-Fi access

Free Wi-Fi will be available during the conference. Access information will be provided at the time of registration including network and password details.

Melbourne

Melbourne, located on the east coast, is the second largest city in Australia. More than 3.5 million people live in the city, which has been voted The World's Most Liveable City on a number of occasions.

Melbourne is one of the most cosmopolitan and multicultural cities in the world, with 140 nationalities representing 100 religious faiths and 180 different languages. While you are here, please explore the city's range of delights. There is something for everyone; diverse arts and cultural attractions, delightful parks and gardens, exciting entertainment options and a vibrant food and wine culture.

Melbourne has a lively passion for social eating and drinking, which is reflected in the thousands of restaurants serving up gastronomic experiences from around the world. Everywhere you will uncover a vast array of fashionable cafes, where you can enjoy Melbourne's existential coffee and cafe culture to the fullest. Once the conference is done for the day, cosmopolitan Melbourne awaits you. Explore the intriguing city where getting lost in a laneway is a highlight: hidden treasures are around each corner and a multitude of festivals will satisfy every one of your senses.

A visit to Melbourne would not be complete without a visit to Queen Victoria Market, Victoria's premier market and a major tourist attraction with fresh produce and general goods. Try to visit while all the produce stalls are operating (Tuesday, Thursday, Friday and Saturday mornings) because they make up the real heart of the market. More information at www.qvm.com.au.

If you have more time on your hands, a visit to regional Victoria unlocks a memory card full of spectacular coastlines, award-winning wineries, premier golf courses, and day spas with natural mineral springs.

For more information on Melbourne's attractions, see www.visitmelbourne.com

Melbourne City Guides

Melbourne Official Visitors Guide

Play Melbourne

Timeout Melbourne

Food and wine

The Age Good Food Guide 2013

The Age Good Café Guide

The Age Good Bar Guide

Arts

ArtsView

Detour Melbourne Street Art Guide

Transport

Public Transport Victoria

13CABS

Mobile phones

Australia operates on a digital network.

As a courtesy to speakers and your fellow delegates, you will be asked to please switch off your mobile phone or set it to silent/mute when in sessions.

Name badges

For security purposes, delegates, speakers, sponsors and exhibitors are required to wear their name badges to all Conference sessions and social functions. Name badges for day registrations will specify the day of attendance and cannot be used to attend sessions outside this period.

Parking

Limited onsite parking is available at the Rydges on Swanston Hotel at a rate of \$25 for 24 hours. Additional parking is available nearby at University Square Car Park

Poster Sessions

Posters will be displayed on Monday only in the Skyline Lounge on Level 4. Poster presenters can place their posters on the correct poster boards from 8.00am Monday morning. Posters should be in place no later than 2:00pm Monday afternoon.

Velcro is available at the registration desk. Please check the abstract book after you have registered to confirm your poster board number.

Poster presenters must be present during the dedicated poster session on Monday evening (7 November) from 18:00 – 19:00. Posters must be removed at the end of the poster session as the boards will be removed from the exhibition area on Monday night. Any uncollected posters will be disposed of.

Program

Every endeavour has been made to ensure that the Conference program details were correct at time of printing. Any subsequent changes or modifications to the program will be announced to delegates throughout the Conference as required.

The Conference Organising Committee reserves the right to change the Conference program at any time without notice. Please note that this program was accurate at the time of printing.

Public transport

Melbourne's public transport system uses a reusable smart card called 'myki'. You can buy and top up your myki at close to 800 retailers including all 7-Eleven stores and the ticket office window at Premium train stations. There is no opportunity to buy or top up on trams so you must purchase and top up the card prior to using public transport. See <http://ptv.vic.gov.au/tickets/myki/> for details.

Registration Desk

The registration desk is located on Level 4 foyer of the Rydges on Swanston Hotel. The registration desk will be open at the following times:

Sunday 6 November	1600 – 1800
Monday 7 November	0730 – 1900
Tuesday 8 November	0745 – 1830
Wednesday 9 November	0745 – 1300
Registration desk telephone:	+61 (0)431 333797

Shopping

Most shops in Melbourne are generally open from 0900 to 1700, Saturday to Wednesday and 0900 to 2100 Thursday to Friday. In all stores and shopping centres, major credit cards are accepted and tax-free shopping is possible within the city. Walking is the best way to shop, especially along Melbourne's arcades and laneways. Outside the city centre, visit shopping precincts like Chapel Street in South Yarra, Acland Street in St Kilda and Brunswick Street in Fitzroy, especially on weekends. Here you'll find everything from retro home wares to funky shops selling cult-in-the-making jewellery. These strips also have many street cafes. Travelling between Melbourne's suburbs is best done by tram.

Smoking

Smoking is not permitted inside any enclosed public place, workplace or and shared area.

Speakers

Presenters that have not sent PPT presentations in advance should hand in their presentations when registering. Presentations should be named by presentation number followed by surname (i.e. OR021_Takano or PL001_Kim).

If you will be using a mac or your own laptop for your presentation please advise the registration desk. Please note if you are presenting with a mac you will need to supply a VGA adapter. Presenters using their own equipment **MUST** set this up in the break before their presentation, please also notify the team at the Registration Desk.

Please be in your presentation room at least 15 minutes prior to the start of your session to meet your chairperson and other presenters and ensure your presentation is loaded and running correctly.

PPT presentations in the all rooms should be saved as 4:3 format (25.4cm wide x 19.05 cm tall).

Taxis

Melbourne taxis are numerous and easy to spot, as they are all painted yellow. Drivers are required to wear a neat uniform and have an identity card on show at all times.

Hailing a taxi

Taxis often wait in designated ranks that are clearly signposted at central locations like major hotels in the CBD, or busy spots such as Flinders Street Station. You can also hail a taxi in the street if the rooftop light is illuminated, it means the taxi is available for hire – telephone bookings are also available. The closest rank to the University is at the Royal Melbourne Hospital, Grattan Street, Carlton. The fare from the hotel to the CBD should be approximately AUD\$10 and to Melbourne Airport approximately AUD\$55, depending on the time of day.

Melbourne's major taxi companies include:

13CABS

Phone: 13 22 27

Silver Top Taxis

Phone: 13 10 08

Taxes

A Goods and Services Tax (GST) of 10% applies to all consumer goods and is included in retail ticket prices. All fees are quoted in Australian Dollars and are subject to GST. In some cases the GST is able to be claimed back on exiting the country.

Tipping

Tipping is not the general custom in Australia and service charges are not added to accounts by hotels and restaurants. However, you may tip hotel porters and food and drink waiters in restaurants (up to 10% of the bill) for special service. At any time, tipping is at your discretion.

Trams

For those wishing to use the trams, delegates should be aware that all trams to and from the city on Swanston Street, terminate at the University of Melbourne. The stop closest to the conference venue is Lincoln Square. Don't forget you will need a MYKI transport card to catch a tram (except the free city circle tram – see below).

The free City Circle tram is purple/maroon in colour. These tram stops are specially marked with a City Circle sign. City Circle trams operate in both directions every 12 minutes between 10am and 6pm from Sunday to Wednesday and between 10am and 9pm every Thursday, Friday and Saturday. Note: This free City Circle tram circles the city and does NOT go directly to Rydges on Swanson.

Useful websites and apps

The following websites contain information on events, film, theatre, exhibitions, dance, music and forums available in Melbourne and further afield.

- www.visitmelbourne.com
- www.thatsmelbourne.com.au
- www.onlymelbourne.com.au
- www.melbournegigs.com

Tap into your travel smarts with your iPhone, iPad or Android phone and download these apps to find your way around Melbourne's bars, restaurants, events and transport.

Weather

Melbourne has a reputation for its changeable weather. A tip is to be prepared for anything – take an umbrella and wear layers that can be worn or removed as needed. November is late spring in Melbourne with average temperatures ranging from 10°C (minimum) to 20°C (maximum).

Social program

Welcome Reception

Date:	6 November 2016
Welcome reception:	1800 – 2000
Venue:	Pool Deck Terrace, 4 th Floor, Rydges on Swanston Hotel
Tickets:	Inclusive for full registered delegates
Additional ticket/s:	AUD \$55
Dress code:	Business attire / Smart Dress. Name badges required.

Pre-register for the Conference and then meet with old and new colleagues in a relaxed and informal environment whilst enjoying drinks and canapés. Admission to the reception is included for all fully registered delegates who registered before Friday 4 November. Late tickets can be purchased for \$55 the conference registration desk.

Conference Dinner

Date:	8 November 2016
Time:	Walk from Rydges on Swanston to venue at 1845
Dinner:	1900 – 2300
Venue:	Dining Hall, Ormond College, 49 College Crescent, Parkville
Tickets:	Inclusive for full registered delegates.
Additional ticket/s:	AUD \$100
Dress code:	Business attire / Smart Dress. Name badges required.

The college, founded in 1881 has grown to become the largest college at the University of Melbourne, and the buildings magnificent neo-gothic architecture and extensive gardens provide a unique backdrop for the dinner.

Ormond College is perfectly located, just a 15-minute walk from the conference venue, Rydges on Swanston. A member of the AWPP 2016 committee will walk with delegates to Ormond College. Please meet in the hotel reception at Rydges on Swanston Hotel at 1845.

For delegates making their own way to Ormond College, turn left out of Rydges on Swanston and left onto Grattan Street. Turn right onto Royal Parade and Ormond College is on the right hand side, just as College Crescent joins Royal Parade.

Delegates that indicated they were attending the dinner will have a ticket behind their name badge. If you do not have a ticket but would like to attend the dinner please see the Conference Registration Desk to book BEFORE 1600 on Monday 7 November.

Optional Site Visits

Wednesday Field Trip: Qenos

Date:	9 November 2016
Time:	1305 – 1730
Venue:	Qenos Resins, 611-629 Kororoit Creek Road , Altona 3018
Departs from:	Lincoln Square North
Tickets:	Included, but pre-bookings required
Dress code:	Closed shoes and long sleeves required. Name badges required.
Host:	Kim Fairhall

Delegates that booked onto this site visit will have a ticket behind their name badge. If you do not have a ticket but would like to attend please see the Conference Registration Desk to book.

Buses will depart from Lincoln Square North (the Restaurant side of Rydges on Swanston) PROMPTLY at 1305. Please board the bus from 1300. The bus will return at approx. 1730 to Rydges on Swanston.

For delegates making their own way to the venue parking is available on site. Delegates should meet in front of the Gate House.

Wednesday Field Trip: Carbon Nexus and CSIRO, Warun Ponds

Date:	9 November 2016
Time:	1305 – 1900
Venues:	Carbon Nexus, NJ Building, Gate 2, 75 Pigdons Road Waurun Ponds CSIRO, NK Building, Gate 2, 75 Pigdons Road Waurun Ponds
Departs from:	Lincoln Square North
Tickets:	Included, but pre-bookings required
Dress code:	Closed shoes. Name badges required.
Host:	CSIRO: Shaun Smith. Carbon Nexus: Russell Varley

Delegates that booked onto this site visit will have a ticket behind their name badge. If you do not have a ticket but would like to attend please see the Conference Registration Desk to book.

Buses will depart from Lincoln Square North (the Restaurant side of Rydges on Swanston) PROMPTLY at 1305. Please board the bus from 1300. The bus will return between 1830 and 1900 to Rydges on Swanston via the airport. Delegates going to the airport should take their luggage with them and leave it on board the bus during the site visit.

For delegates making their own way to the venue they should enter via Gate 2, Pigdons Road (1st Left going under freeway after freeway exit and turning right onto Princess Highway). Meet out of the front of the NJ building. There is a free car park opposite building NR, alternatively you can pay for a ticket at the machine (on the service road by gate 2). Site maps are available from the conference registration desk.