







Asia-Pacific International Conference on Additive Manufacturing

APICAM 2019 - 30 June - 3 July 2019 RMIT University, Melbourne, AUSTRALIA









The 2nd Asia-Pacific International Conference on Additive Manufacturing (APICAM) is the not-to-be-missed industry conference of 2019. APICAM was created to provide an opportunity for industry professionals and thinkers to come together, share knowledge and engage in the type of networking that is vital to the future of the additive manufacturing industry.

RMIT University, Melbourne

Some of the leading minds in the industry will give presentations on pressing issues and the ways in which innovations can navigate challenges. Important areas such as 3D printing and additive manufacturing in the automotive, biomedical, defence and aerospace industries will be covered by experts from each respective field.

The event is being curated by Materials Australia, the peak Australian materials technology body, which has drawn on its considerable pull in the industry to create a world-class event that is a must-attend for anyone involved in the additive materials industry. The main features of APICAM 2019 will include presentations by experts as well as workshops that will help attendees sharpen their skills and then be able to pass on this knowledge to other industry professionals. The event has been designed to allow for ample networking time so that important knowledge-transfer can take place and partnerships can be created that will enrich the industry.

Tanya Smith | Materials Australia

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The purpose of this conference is to provide a focused forum for the presentation of advanced research and improved understanding of various aspects of additive manufacturing.

This conference will include lectures from invited internationally distinguished researchers, contributed presentations and posters.

Contributions will be encouraged in the following areas of interest:

- Additive Manufacturing of Metals
- Additive Manufacturing of Polymers
- Additive Manufacturing of Concretes
- Advanced Characterisation Techniques and Feedstocks
- Computational Modelling of Thermal Processes for Metallic Parts
- Part Design for Additive Manufacturing
- Failure Mechanisms and Analysis
- Mechanical Properties of Additively Manufactured Materials
- New Frontiers in Additive Manufacturing
- Process Parameter and Defect Control
- Process-Microstructure-Property Relationships
- Testing and Qualification in Additive Manufacturing



Professor Jian-Feng Nie - Monash University



Jian-Feng Nie received his B.Eng. degree from Beijing Institute of Technology in 1986 and PhD degree from Monash University in 1993. He is a professor of Monash University. His current research interests cover physical metallurgy of magnesium and aluminium alloys, applications of scanning transmission electron microscopy in materials characterisation, and processing-microstructure-property relationships in metallic alloys. He has co-authored one book on light alloys, published one book chapter in the 5th edition of *Physical Metallurgy*, co-authored over 150 papers in major international journals, and edited proceedings of several major international conferences. He was awarded the Marcus Grossmann Young Authors Award of ASM International in 2006, AIME Champion Mathewson Medal Award of TMS in 2015, and TMS Extraction and Processing Division Technology Award in 2017. He is the editor of *Metallurgical and Materials Transactions*, the former Chair of Phase

Transformations Committee of TMS, and Chair of the National Events Committee of Materials Australia. He chaired several international conferences, including the 7th Pacific Rim International Conference on Advanced Materials and Processing (PRICM-7), which was held in Cairns in 2010.

Professor Ma Qian - RMIT University



Dr Ma Qian is Professor and Deputy Director of the Centre for Additive Manufacturing (AM) at Royal Melbourne Institute of Technology. His current research centres on metal AM, solidification, and powder metallurgy. He co-developed "The Interdependence Theory for Grain Formation in Solidification" (Acta Mater 2011;59:4907; 2010;58:3262), which is being applied to metal AM today, and a novel SLM process for Ti-6Al-4V (Acta Mater 2015;85:74), and also with his team, identified massive phase transformation in AM Ti-6Al-4V (Acta Mater 2016;104:303). He co-authored the 5th edition lan Polmear book *Light Alloys: Metallurgy of the Light Metals* (2017, Elsevier) with lan Polmear, David StJohn and Jian-Feng Nie, and edited two Elsevier books on titanium with F. H. Froes. With his collaborators and students, he has published 202 journal papers, which have resulted in the Australian CAST-CRC Industry Partner's Award (2002, inaugural), TMS Magnesium Technology Award (2003), ASM Henry Howe Medal (2006), the Australian ARC CoE for Design in Light

Metals best paper awards (2012; 2103) and five other awards. He initiated the biannual international conference on *Titanium Powder Metallurgy* in 2011 (co-sponsored by Materials Australia, TiDA, TMS, JSPM and CSM). Currently he serves as an Associate Editor for *Acta Materialia* and *Scripta Materialia*.





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Materials Australia is pleased to announce that we already have an exciting line-up of Plenary Speakers confirmed for the APICAM2019 Conference.

Just some of the speakers include representatives from global organisations Boeing and GE, as well as Professor Christoph Leyens (Managing Director, Fraunhofer Institute of Materials and Beam Technology), Professor Huiping Tang (Chief Scientist, Sailong Metal Materials), Professor David Bourell (Mechanical Engineering and Materials Science and Engineering, University of Texas at Austin), and Professor Tresa Pollock (Materials, University of California, Santa Barbara).



Boeing – (Speaker to be confirmed)

Additive Manufacturing at Boeing

Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners, defence, space and security systems, and service provider of aftermarket support. As America's biggest manufacturing exporter, the company supports airlines and US and allied government customers in more than 150 countries. Boeing has invested heavily in additive manufacturing, including a project to develop standard materials and processes for titanium powder bed additive manufacturing.



GE Additive – (Speaker to be confirmed)

Additive Manufacturing at GE

GE is the world's digital industrial company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is working to build a network of people who are advancing additive manufacturing every day. GE's relationships with Arcam and Concept Laser complements their existing material science and additive capabilities, enabling the development of new service applications across multiple GE businesses.



Professor Christoph Leyens



Recent Developments in Additive Manufacturing in Europe

Dr Leyens is a Professor of Materials Science at the Technische Universität, and the Director of the Fraunhofer Institute of Materials and Beam Technology, both located in Dresden, Germany. Dr Leyens has covered a wide range of research topics with a focus on high temperature and light weight materials, functional materials, surface technology, coatings and additive manufacturing. He has published more than 200 papers, seven books and holds 11 patents.

Professor Huiping Tang



3D Printed Orthopaedic Implants in China

Dr Tang is a Professor and Director of the State Key Laboratory of Porous Metal Materials, at the Northwest Institute for Nonferrous Metal Research in Xi'an, China. Her research includes metal additive manufacturing (AM) by selective electron beam melting (SEBM), porous metal materials, and powder metallurgy. Since 2001, she has led a team focused on metal powder production for AM, SEBM technologies, and the manufacture of orthopedic implants.

Professor David L. Bourell



Polymers for Powder Bed Fusion

Dr Bourell is the Temple Foundation Professor of Mechanical Engineering at The University of Texas at Austin. Dr Bourell's areas of research include particulate processing with emphasis on sintering kinetics and densification, and materials issues associated with Laser Sintering (LS). A leading expert in advanced materials for LS, Dr Bourell has worked in this area since 1988 and was the lead author on the original materials patent for LS technology. Dr Bourell is a Fellow of TMS and ASM International.

Professor Tresa Pollock



Structure Evolution Across Build Layers in EB Additive Nickel Alloys

Dr Pollock is the Alcoa Distinguished Professor of Materials at the University of California, Santa Barbara. She graduated with a PhD from MIT in 1989, and was employed at General Electric Aircraft Engines from 1989 to 1991. Professor Pollock was elected to the US National Academy of Engineering in 2005, is a Fellow of TMS and ASM International, Principal Editor of *Metallurgical and Materials Transactions* and was the 2005-2006 President of The Minerals, Metals and Materials Society.



APICAM2019 PARTNER & DISPLAY PACKAGES



PLATINUM SPONSORSHIP

- > Profile your company as a **Platinum Sponsor** on the APICAM2019 website with logo, information (100 words) and web link
- > Acknowledgements in all pre-conference advertising and promotional material as well as the Materials Australia magazine (distributed both nationally and overseas)
- > Listing in the Program Book as a Platinum Sponsor
- > One full page advertisement in the Program Book
- > Double table top display with four chairs (x2 Zones) Choice of display location
- > Company banner in the Registration area
- > Company banner on stage during the Plenary Sessions (banners to be supplied by partner)
- > Company banner in the catering space during breaks
- > Your logo on the projection screen in the Plenary Room between speakers
- > Acknowledgement by our MC at opening and closing ceremonies
- > Four (4) Full Registrations (including Conference Dinner)
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)

GOLD SPONSORSHIP

- > Profile your company as a **Gold Sponsor** on the APICAM2019 website with logo, information (100 words) and web link
- > Acknowledgements in all pre-conference advertising and promotional material as well as the Materials Australia magazine (distributed both nationally and overseas)
- > Listing in the Program Book as a Gold Sponsor
- > Table top display with two chairs
- > Company banner will be placed on stage during the Plenary Sessions (banners to be supplied by partner)
- > Your logo on the projection screen in the Plenary Room between speakers
- > Acknowledgement by our MC at opening and closing ceremonies
- > Two (2) Full Registrations (including Conference Dinner)
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)

SILVER SPONSORSHIP

- > Profile your company as a Silver Sponsor on the APICAM2019 website with logo and web link
- > Acknowledgements in all pre- Conference advertising and promotional material as well as the Materials Australia magazine (distributed both nationally and overseas).
- > Listing in the Program Book as a Silver Sponsor
- > Table top display with 2 chairs
- > Your logo on the projection screen in the Plenary Room between speakers
- > Acknowledgement by our MC at opening and closing ceremonies
- > Two (2) Day Registrations (excluding the Conference Dinner)
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)

\$10,000

+gst

+gst

Conference Dinner Sponsorship

This Partnership Package includes exposure for all days of the conference as well as the conference dinner.

- > Profile your company as a Major Sponsor on the website with logo, information (100 words) and web link
- > Acknowledgements in all pre-conference advertising and promotional material as well as the Materials Australia magazine (distributed both nationally and overseas)
- > Company banner will be placed on stage during the Dinner (banner to be supplied by partner)
- > Co-host the event and present prizes
- > Your logo on the projection screen in the Plenary Room
- Listing in the Program Book
- Acknowledgement by our MC at opening and closing ceremonies
- > Two (2) Full Registrations (including the Conference Dinner)
- > Two (2) Additional Conference Dinner Registrations
- Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)

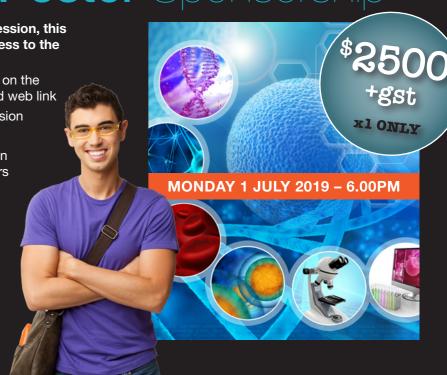


Welcome/Poster Sponsorship

As well as sponsoring the Poster Session, this Partnership Package gives you access to the whole conference.

> Profile your company as a Sponsor on the APICAM website with your logo and web link

- > Company banner at the Poster Session
- > Present the Poster Award
- > Your logo on the projection screen in the Plenary Room between speakers
- Listing in the Program Book
- > Acknowledgement by our MC at opening and closing ceremonies
- > One (1) Full Registration (including Conference Dinner)
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)





APICAM2019 PARTNER & DISPLAY PACKAGES



YOUR BANNER

CATERING SPONSORSHIP

As well as sponsoring the Catering, this Partnership Package gives you access to the whole conference.

- Profile your company as a Sponsor on the APICAM2019 website with your logo. and web link
- Company banners in the catering space during breaks
- > Your logo on the projection screen in the Plenary Room between speakers
- Listing in the Program Book
- > Acknowledgement by our MC at opening and closing ceremonies
- > One (1) Full Registration
- Insert into conference bag supplied by the partner
- List of conference delegates (subject to privacy laws)



USB SPONSORSHIP

Extend your reach after the conference. This will be the conference information hub - all abstracts will be loaded on this mobile storage device.

- > Your logo printed in one colour, on one side of the USB
- > Profile your company as a Conference Supporter on the APICAM2019 with logo and web link
- > Acknowledgement by our MC at opening and closing ceremonies
- > Your logo on the projection screen in the Plenary Room between speakers
- > Listing in the Program Book
- > Advertisement/promotional brochure placed on the Conference USB
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)



LANYARD SPONSORSHIP

This is the place to be seen. The Conference Nametag is the essential item at all conferences.

- > Your logo printed one colour onto the lanyards. Lanyard colour of your choice
- > Profile your company as a Conference Supporter on the APICAM2019 with logo and web link
- > Acknowledgement by our MC at opening and closing ceremonies
- > Your logo on the projection screen in the Plenary Room between speakers
- > Listing in the Program Book

10

- Insert into conference bag supplied by the partner
- List of conference delegates (subject to privacy laws)



+gst

X1 ONLY

> Your logo on the projection screen in the Plenary Room between speakers > Acknowledgement by our MC at opening and closing ceremonies > Two (2) Day Registrations (excluding the Conference Dinner) > Insert into conference bag supplied by the partner > List of conference delegates (subject to privacy laws)

SATCHEL SPONSORSHIP

The Conference Satchel is an essential item at all conferences and this is your opportunity to be seen throughout the conference.

EXHIBITION SPONSORSHIP

This Partnership Package includes exposure for all days of the conference.

> Profile your company as a **Exhibition Sponsor** on the APICAM2019 website

> Acknowledgements in all pre-conference advertising and promotional material

- > Your logo printed one colour onto the Conference Satchel
- > Profile your company as a Conference Supporter on the APICAM2019 with logo and web link
- > Acknowledgement by our MC at opening and closing ceremonies
- > Your logo on the projection screen in the Plenary Room between speakers
- > Listing in the Program Book

with logo and web link

> Table top display with two chairs

> Listing in the Program Book as a Silver Sponsor

- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)

PRODUCT DETAILS

- Recyclable / Bio Degradable
- Material: White Kraft Paper
- > Dimensions: 350mm (H) x 260mm (W)
- > Thickness: 110 GSM
- > Side Gusset: 90mm
- > Base: Block Bottom
- Bag Colour: Colour that best suits sponsor logo
- > Printed 1 colour x 2 sides









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APICAM 2019 PARTNER & DISPLAY PACKAGES



PEN SPONSORSHIP

This Partnership Package includes exposure for all days of the conference.

- Your logo printed one colour onto the Conference Pen
- Profile your company as a Conference Supporter on the APICAM2019 with logo and web link
- > Acknowledgement by our MC at opening and closing ceremonies
- > Your logo on the projection screen in the Plenary Room between speakers
- Listing in the Program Book
- Insert into conference bag supplied by the partner
- List of conference delegates (subject to privacy laws)



PROGRAM SPONSORSHIP

This Partnership Package includes exposure for all days of the conference.

- > Your logo printed on the cover of the Conference Program
- > Full Page advertisement on the back cover of the Conference Program
- > Profile your company as a Sponsor on the APICAM2019 website with your logo and web link
- > Your logo on the projection screen in the Plenary Room between speakers
- > Listing in the Program Book
- > Acknowledgement by our MC at opening and closing ceremonies
- > Insert into conference bag supplied by the partner
- > List of conference delegates (subject to privacy laws)



NOTEPAD SPONSORSHIP

The Conference Notepad is your opportunity to be seen throughout the conference

- > Your logo printed full colour onto the Conference Notepad
- > Profile your company as a Sponsor on the APICAM2019 website with your logo and web link
- > Your logo on the projection screen in the Plenary Room between speakers
- Listing in the Program Book
- > Acknowledgement by our MC at opening and closing ceremonies
- Insert into conference bag supplied by the partner
- List of conference delegates (subject to privacy laws)



\$2500 +gst

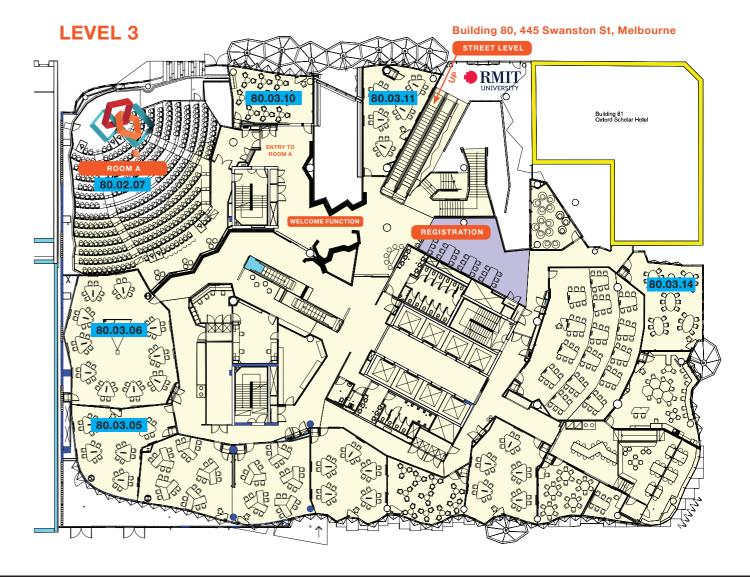
PUBLIC LIABILITY INSURANCE

Materials Australia, APICAM2019 and RMIT University will not be held accountable or liable for any damage, loss, harm or injury to any person or any property of the exhibition however caused. Exhibitors are required to ensure that they have \$10 million of Public Liability Insurance in respect of bodily injury to persons, or property damage. Exhibitors are required to submit a copy of their Public Liability Insurance certificate along with their booking form. Please note: If your normal business insurance only covers your stock at your normal place of business, you should consider taking out additional insurance to cover your stock from the time your goods are dispatched to the exhibition until they are returned to your premises.

SECURITY AND INSURANCE

Materials Australia, APICAM2019 and RMIT University will provide reasonable security during the conference, however neither the organisers, nor the convention centre, nor any of their staff, employees, agents or other representatives shall be held accountable, responsible or liable for, and the same are released from accountability, responsibility or liability, for any damage, loss, harm or injury however caused to persons or property of the exhibitor or the exhibitor's staff, employees, agent or other representatives, nor to goods or other property sent off in transit to the RMIT University or remaining there after the

PLEASE NOTE: Exhibitors should consult their own insurance companies for proper coverage on their exhibition equipment and displays (especially audio-visual equipment).







VENUE - Building 80 (Swanston Academic Building)

The conference will be held in in the Swanston Academic Building, Building 80, 445 Swanston Street, Melbourne.

Swanston Academic Building (SAB) is one of the newest and most iconic buildings of RMIT University.

RMIT was established as the Working Men's College in 1887 with the aim of bringing educational opportunities to Melbourne's working class. The University has stayed true to its roots while working to create truly innovative teaching, learning and research programs that are continually updated to ensure students are receiving the type of knowledge they need to meet and solve modern challenges.

RMIT is a globally-focussed institution. It has teaching partnerships throughout Asia and Europe, and research and industry partnerships on every continent. RMIT continues to drive research and innovation through its work.

RMIT University City Campus - Features and Facilities



RMIT's Melbourne City campus thrives in the urban heart of the world's most liveable city; surrounded by rich treasures – from restaurants and cafés to parks, markets and the State Library of Victoria.

Unlike other university campuses, it isn't closed off, or surrounded by walls - City campus life is Melbourne city life.

The campus is accessible by public transport and provides key features such as libraries, study spaces, wi-fi, childcare and a bustling fitness centre.

RMIT's facilities and buildings are constantly evolving and expanding to meet the demands of contemporary university life. Across the campus you'll find new award-winning buildings like the Swanston Academic Building and the Design Hub, and outdoor recreational spaces including the Alumni Courtyard and the A'Beckett Urban Square.

There are plenty of cheap and healthy food and drink outlets offering breakfast, lunch, coffee, snacks and drinks. You'll also be in walking distance to hundreds of local restaurants and cafes, Melbourne Central and QV food courts and the famous Queen Victoria Market.

About Melbourne CBD

The venue is within walking distance of a number of Melbourne landmarks. Head down Swanston Street and onto St Kilda Road, and you'll come across the National Gallery of Victoria, home to one of the finest art collections in Australia. You can then amble down Southbank Promenande and try your luck at Crown Casino. Or if you head in the other direction, you can walk down the banks of the Yarra River and into the Botanical Gardens. Hop on a tram or train and in minutes you can arrive in the vibrant space that is Richmond, full of cafes, pubs, cutting edge dining experiences and the most famous Melbourne landmark, the MCG.

Chinatown (with it's delicious, yet inexpensive eats) is mere minutes away from RMIT, the bustling Queen Victoria Market is just a short walk down Latrobe Street, and the dining hotspot of Flinders Lane is also very close-by. You are literally surrounded by eating, drinking and cultural experiences. For a taste of what Melbourne has to offer, you couldn't ask for a better location.





Getting To RMIT University

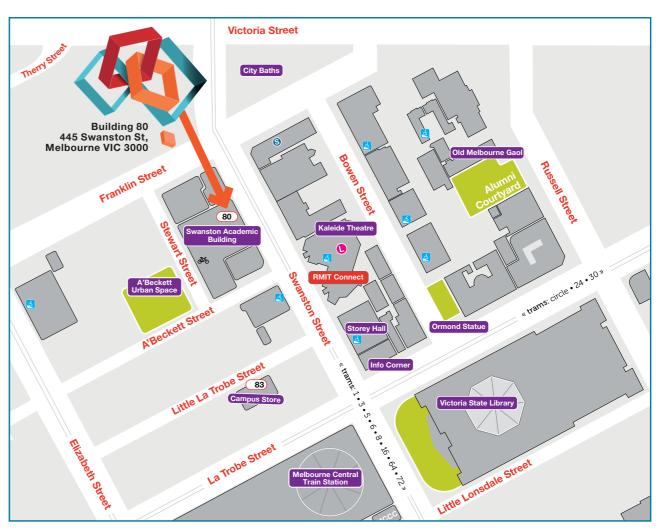
The University is located in the heart of the CBD, making it walking distance or a short tram or train ride from most of the CBD's landmarks and accommodation. Driving yourself to the venue isn't recommended as parking can be difficult to find and traffic is always a problem.

No matter where you are in Melbourne all you have to do is get on a City Loop train and get off at Melbourne Central station.

If you're coming by tram, most north-south Yarra Trams run along Swanston Street (routes 1, 3, 5, 6, 8, 16, 64, 67 and 72). For Elizabeth Street services (routes 19, 57, 59), get off at Melbourne Central and walk one block to Swanston Street.



If you're travelling east-west along Flinders Street (routes 48, 70 and 75), Collins Street (routes 109 and 12) or Bourke Street (routes 86 and 96), just jump off at Swanston Street for connecting trams.









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Institute of Materials Engineering Australasia Ltd. **Trading as Materials Australia**

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