

Centre for Advanced Manufacturing of Prefabricated Housing

[ABOUT THE CENTRE](#)[PARTNERS](#)[RESEARCH](#)[PEOPLE](#)[NEWS AND EVENTS](#)

Unlocking the potential growth of Australia's prefabricated building industry.

The ARC Training Centre for Advanced Manufacturing of Prefabricated Housing is the centrepiece for collaborative, eco-friendly, prefabricated housing research in Australia, striving to deliver breakthrough product and process innovations that will enable the Australian housing industry to compete on a global stage.

The centre aims to unlock the potential growth of Australia's prefabricated building industry by creating a co-operative training system between industry and universities leading to local employment growth and increased exports of prefabricated products and services.

Administered by the University of Melbourne, and led by [Prof Priyan Mendis](#) and [Assoc Prof Tuan Ngo](#) from [Department of Infrastructure Engineering](http://www.ie.unimelb.edu.au/) (<http://www.ie.unimelb.edu.au/>), the Centre brings together a highly collaborative venture involving four universities and twelve industry partners.

This initiative, which has attracted funding of \$6M over four years, including significant investment from the Australian Research Council, is testament to the critical importance of this industry in Australia, and demonstrates the value that both industry and government place in collaborative, cross-disciplinary research.

AUSTRALIAN RESEARCH COUNCIL



Australian Government

Australian Research Council

The ARC Training Centre for Advanced Manufacturing of Prefabricated Housing acknowledges the generous support from the Australian Research Council through its [Industrial Transformations Research Programme](http://www.arc.gov.au/industrial-transformation-research-programme) (<http://www.arc.gov.au/industrial-transformation-research-programme>), which offers a suite of funding schemes attractive to both university-based researchers and industries.

The ARC Training Centre for Advanced Manufacturing of Prefabricated Housing was awarded \$4M in funding, under the Industrial Transformation Research scheme, which has the following objectives:

1. Encourage collaborative Research and Development projects to address challenging industry issues solved through innovative research relevant to the Industrial Transformation Priorities
2. Attract investment from the global and international business community by underpinning internationally-recognised excellence of Australian universities and their industry partners
3. Leverage private and international investment in targeted industry sectors

[Find out more about the ARC and its programs](http://www.arc.gov.au/) (<http://www.arc.gov.au/>)

COLLABORATING ORGANISATIONS

(<http://www.unimelb.edu.au/>)



University of
Melbourne

(<http://www.monash.edu.au/>)



Monash
University

(<http://sydney.edu.au/>)



University of
Sydney

(<http://www.curtin.edu.au/>)



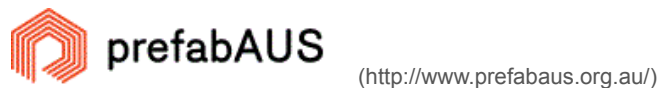
Curtin
University of

COLLABORATING PARTNERS



Amoveo is an Australian owned modular building company. Amoveo can provide modular solutions which encompass design, engineering, manufacture in a safe, compliant and effective manner. The distribution network, which operates throughout Australia, Papua New Guinea, East Timor and New Zealand, works closely with each customer to create a comprehensive solution that meets specific requirements.

AMOVEO ([HTTP://WWW.AMOVEO.COM.AU/](http://www.amoveo.com.au/))



PrefabAUS is the Peak Industry body for prefabrication in Australia. We are passionate about the role of prefabrication in transforming our built environment, such as decreasing construction time frames and construction waste while increasing quality, productivity and affordability. We believe there is an exciting future for Australia's building prefabrication industry. [Become a PrefabAUS member.](http://www.prefabaus.org.au/join-prefab/) (<http://www.prefabaus.org.au/join-prefab/>)

PREFABAUS ([HTTP://WWW.PREFABAUS.ORG.AU/](http://www.prefabaus.org.au/))



Prebuilt integrates efficient, economical, design-led architecture with Australian modular prefab construction. Whether we are creating a modest country weekender or a landmark home in an expensive street, each of our prefab homes is architect-designed, built undercover and transported in modules across Australia. Prebuilt will change your mind about prefabricated houses

PREBUILT ([HTTP://PREBUILT.COM.AU/](http://prebuilt.com.au/))



Forest and Wood Products Australia Limited (FWPA) is a not-for-profit company that provides national, integrated research and development services to the Australian forest and wood products industry. FWPA supports research and development that promotes internationally competitive and environmentally sustainable practices.

FOREST & WOOD PRODUCTS AUSTRALIA (FWPA) ([HTTP://WWW.FWPA.COM.AU/](http://www.fwpa.com.au/))



(<http://www.habitechsystems.com.au/>)

Habitech Systems is an Australian owned venture established in 2008, with headquarters in Melbourne. The company has invested in extensive research, development and testing of the Habitech modular building system, for the Australian market. Our innovative building design technology is driven by sustainability, taking advantage of environmentally-friendly materials and processes.

HABITECH SYSTEMS ([HTTP://WWW.HABITECHSYSTEMS.COM.AU/](http://www.habitechsystems.com.au/))



(<http://www.envirosip.com/>)

EnviroSIP — the strong, light-weight, fire resistant panels that deliver exceptional value and are available in sizes to meet almost any need. Designed and manufactured to the exacting demands of the Building Code of Australia, EnviroSIP products stand the test of time and look good too.

ENVIRO SIP ([HTTP://WWW.ENVIROSIP.COM/](http://www.envirosip.com/))



(<http://tbsaus.com.au/>)

Timber Building Systems (TBS) is a unique and revolutionary post tensioned pre-manufactured building system. The technology provides our clients with a sustainable solution, fast turnaround, exceptional architectural design flexibility, high quality, unparalleled customer service, and lower overall costs. TBS's patented building assembly system provides wood-based integrated flat pack panels that include structural as well as plumbing and electrical service elements.

TIMBER BUILDING SYSTEMS (TBS) ([HTTP://TBSAUS.COM.AU/](http://tbsaus.com.au/))



(<http://www.arcreo.com.au/>)

The Australian Reinforcing Company (ARC) is one of Australia's leading manufacturers and suppliers of steel reinforcing and fencing products and services. Our history virtually mirrors the growth of Australia since 1920, when The Australian Reinforced Concrete Engineering Company (ARC) was formed in Sunshine, Victoria. We have a diverse range of products and customers and value the relationships with our employees, customers and suppliers.

THE AUSTRALIAN REINFORCING COMPANY (ARC) ([HTTP://WWW.ARCREO.COM.AU/](http://www.arcreo.com.au/))



(<http://www.modulum.com.au/>)

Modulum is a patented prefabrication system that allows for a quick and accurate costing of the build, saving the client design fees and labour costs. The pre-tested, prefabricated components are built within a controlled environment, cutting the cost of a build considerably — on average a Modulum home is twenty per cent cheaper than a traditionally built home, and is built in two thirds of the time of a traditional build.

MODULUM ([HTTP://WWW.MODULUM.COM.AU/](http://www.modulum.com.au/))



THE FUTURE OF HOUSING

(<http://www.tektum.com.au/>)

Tektum has developed a disruptive technology, the SPACE2.0 building platform, to transform the pre-industrial construction industry into a high-tech one, ensuring buildings can be produced at a higher quality for a lower cost. Produced in a factory environment, the process includes the manufacture with sub-millimetre tolerances unlocking mass-production, increasing energy efficiency, optimising material use and reducing its carbon-footprint.

TEKTUM ([HTTP://WWW.TEKTUM.COM.AU/](http://www.tektum.com.au/))



(<http://www.richardkirkarchitect.com/en/>)

Kirk was established in Brisbane, Australia in 1995 as Richard Kirk Architect. The practice has expertise in architecture, urban design and environmentally sustainable design, with studios in Brisbane, Beijing and Kuala Lumpur. The practice has a deep passion for developing construction methods and material knowledge to produce unique buildings that respond directly to each client, brief and circumstance.

RICHARD KIRK ARCHITECT ([HTTP://WWW.RICHARDKIRKARCHITECT.COM/EN/](http://www.richardkirkarchitect.com/en/))



(<http://www.cimc-mbs.com/>)

CIMC-MBS was founded in 2004. It is a unique provider of “profit driven” solutions with over 4 manufacturing facilities across 3 locations and 5 branches servicing customers world wide. CIMC MBS is the leading modular building provider in the world, building across a number of sectors including Hotel and Hospitality, Student Accommodation, Apartment and workforce accommodation.

CIMC MODULAR BUILDING SYSTEMS ([HTTP://WWW.CIMC-MBS.COM/](http://www.cimc-mbs.com/))

RESEARCH PROGRAMS



Innovation in design and enhanced end user experience



Advanced building systems and assembly



Novel materials and composite structures



Supply chain and financing innovation

20 December 2016

Built Offsite: a new publication for the prefab construction industry



Australia's building industry is on the precipice of deep structural change and offsite construction is at the very heart of that process. Prefabrication or offsite construction is changing the way buildings are designed and built. By 2020 the offsite building sector is forecast to account for 10% of all GDP construction; a figure in today's statistics that represents \$3.2 billion. Built Offsite magazine gives process a voice and will bind the industry together in a sharp, well-written and researched voice that is published to be used.

Built Offsite is published bi-monthly six times per year, and is available in one and two year subscriptions.

(<http://builtoffsite.com.au/>)

10 November 2016

ARC CAMPH officially launched



Senator Scott Ryan officially launched the ARC Centre for Advanced Manufacturing of Prefabricated Housing (CAMPH) on 4 November at The University of Melbourne. Attended by around 130 representatives from industry and research, the proceedings also included presentations by Centre Director Prof Priyan Mendis, Research Director Assoc Prof Tuan Ngo, University of Melbourne Vice Chancellor Prof Davis, ARC Executive Director Dr Cameron, Partner Investigator Tom Vassos and Centre Chief Investigator Prof Colin Duffield. Following the official proceedings, the Centre's postdoc and PhD students provided displays showcasing the research and training activities currently in progress.

The overwhelming message was that Australia's building industry needs to innovate, collaborate and transform to meet the demands on the 21st Century including the growing need for affordable housing. The Centre is working with industry to develop innovative solutions for a broad spectrum of projects to promote prefabricated construction.

10 November 2016

ARC CAMPH Research and Training Committee workshop



The Centre's Research and Training Committee assembled on 4 November following the official Centre launch. Collaborating Organisations include The University of Melbourne, The University of Sydney, Monash University and Curtin University. Collaborating Partners include prefabAUS, Amoveo, ARC Reinforcing Co, CIMC, EnviroSIP, FWPA, Habitech, Kirk Architect, Modulum Homes, Prebuilt, Tektum and Timber Building Systems.

An afternoon workshop for the Chief Investigators and Partner Investigators of the Centre's Research and Training Committee explored opportunities for collaboration and strategies to advance the Australian prefab industry. The discussion covered the many innovative research projects being undertaken by the postdoc and PhD students.

20 October 2016

ARC-CAMPH at prefabAUS 2016 conference

The ARC Centre for Advanced Manufacturing of Prefabricated Housing is proud to have been a part of the prefabAUS 2016 conference. Hosted by the University of Sydney (Collaborating Organisation to the ARC Centre) the conference was an opportunity for leading minds from Australia and abroad to come together to share insights and explore opportunities for collaboration.



The conference included presentations by Centre Research Director Assoc Prof Tuan Ngo, Centre Industry Engagement representative and prefabAUS Chairman Damien Crough, and PhD candidate Mr Tharindu Samarasinghe.

The ARC Centre congratulates prefabAUS (Collaborating Partner to the Centre) on this year's highly successful event and looks forward to participating in future conferences.

(<http://www.prefabaus.org.au/conference/>)

22 September 2016

Research Director presenting at 2016 prefabAUS conference



Research Director Associate Professor Tuan Ngo will be presenting at the upcoming prefabAUS conference on the topic of "*Latest innovations and R&D activities in prefabricated building construction*". The 2016 prefabAUS conference is exploring the theme of "*Delivering next generation buildings*" and is being held at The University of Sydney from 10–12 October.

(<http://www.prefabaus.org.au/>)

22 September 2016

Modular and Offsite Construction Summit, 29 September – 1 October, Canada



The Industry Engagement Manager of the ARC-CAMPH Training Centre and Founding Director and Board Chair of PrefabAUS, Mr Damien Crough, will be providing a keynote speech at the Modular and Offsite Construction Summit in Edmonton, Alberta, Canada. The title of Damien's keynote speech is "*Changing perceptions of prefabrication through research and collaboration*". The presentation will examine how prefab has evolved, including via technologies borrowed from the automotive and aerospace industries, to build modern building systems.

(<http://www.mocsummit.com/>)

30 March 2016

Presentations at Modular Construction & Prefabricated Construction ANZ 2016

The ARC-CAMPH was well represented at the 2016 Modular Construction & Prefabricated Construction ANZ conference held between 30–31 March in Sydney. Research Director, Assoc Prof Tuan Ngo provided a keynote address on "*Challenges and innovations in designing for resilient and sustainable prefabricated modular buildings*". Industry Engagement Manager, Mr

Damien Crough provided a presentation titled "*Research and collaboration as the key enabler to industry growth*". Warren McGregor, CEO of prefabAUS also provided a keynote address on "*Offsite construction isn't waiting for you — so you'd better be ready*". The conference provided an opportunity for focused discussions on how modern methods of construction can achieve productivity breakthroughs and accelerate delivery.

(<http://claridenglobal.com/conference/modconandprefab-anz/>)

15 August 2016

PrefabAUS and ARC-CAMPH welcomes BCA Singapore

prefabAUS and the ARC Training Centre for Advanced Manufacturing of Prefabricated Housing (CAMPH) welcomed a large delegation of representatives from Singapore's Building & Construction Authority. An afternoon workshop and evening networking event provided an excellent opportunity to discuss the latest technologies and strategies to boost productivity, improve quality and safety in the construction industry through modular construction. The discussion provided a tremendous knowledge-sharing opportunity and helped establish a commitment to ongoing international collaboration.

