

Overview of

Australian Network of Structural Health Monitoring

Presented by

Prof. Tommy H. T. Chan

President of ANSHM

ANSHM.org.au





ANSHM Launching Ceremony (2009)



Australian Network of Structural Health Monitoring

To **promote** and **advance** the Field of Structural Health Monitoring in Australia

- a) To **coordinate** and **integrate** efforts for better development and application of SHM techniques in Australia;
- b) To **showcase** achievements, **exchange** ideas and **disseminate** knowledge nationally and internationally;
- c) To promote and facilitate national and international **collaborative research** and development; and
- d) To **raise general community awareness** on the need for and value of SHM research and application



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Members from the following Organisations

Universities

- U of Adelaide
- Curtin U
- Deakin U
- Griffith U
- James Cook University
- Monash U
- QUT
- RMIT
- Swinburne University
- Southern Cross University
- U of Melbourne
- U of Newcastle
- U of New South Wales
- ▶ U of Surrey (∐K)

Universities (cont'd)

- U of South Australia
- U of Western Australia
- U of Western Sydney
- U of Wollongong
- Victoria University
- Authorities
 - Australian Rail Track
 Corporation
 - Main Roads WA
 - NZ Transport Authority
 - Queensland Department of Transport and Main Roads
 - Transport for NSW
 - Department of Transport, Victoria

- Private Companies
 - AECOM
 - Arup
 - Aspec Engineering Pty Ltd.
 - Australiawide Consulting Service Pty Ltd.
 - Bentley Systems, Inc.
 - Bestech Australia Pty Ltd.
 - Beta International Associates Pty Ltd
 - CJC Rail & Program Services
 - Dywidag-Systems Australia
 - EngAnalysis
 - Engineering Advice Pty Ltd.
 - Heywood Engg. Solutions
 - IDS Australia
 - Jacobs
 - Meriton

- Private Companies (cont'd)
 - Mincka Engineering Pty Ltd.
 - Monitor Optics System
 - Natirar Consulting Services
- NPO SODIS
- NVMS
- Pitt & Sherry
- Rockfield Technologies
- Sci-Meas
- Site Geotechnical
- SMEC
- Sterling Group
- Transurban
- Research Organisations
 - Australian Road Research Board
 - CSIRO
 - Data61



Growth of ANSHM in Recent Years

2018

- No. of Universities: 19
- No. of Private Companies: 11
- No. of Road Authorities: 6
- No. of Research Institutes: 3

2022

- No. of Universities: 21
- No. of Private Companies: 27
- No. of Road Authorities: 6
- No. of Research Institutes: 3

Total No. of Organisations: 39

Total No. of Organisations: 57





ANSHM Achievements

since its establishment in 2009

Workshops – ANSHM Annual Workshops, SHMII-8, Special Sessions



Publications – Book, Special Issues, Newsletter



Structures with SHM Systems



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Education – Forums, Seminars, Undergraduate Courses





AS 5100.7.20

Design Standards –	A5 \$100.7 1047	
AS5100 2017		Austrolion STANDARD
(released in 3/2017)		Bridge design Part 7: Bridge assessi



SHM has become a recognised discipline in Australia



ANSHM Workshops in 2018 ANSHM ARC ITTC Workshops



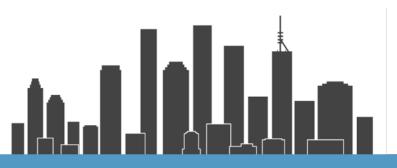
Melbourne (17 Jul 2018)



Brisbane (21 Aug 2018)



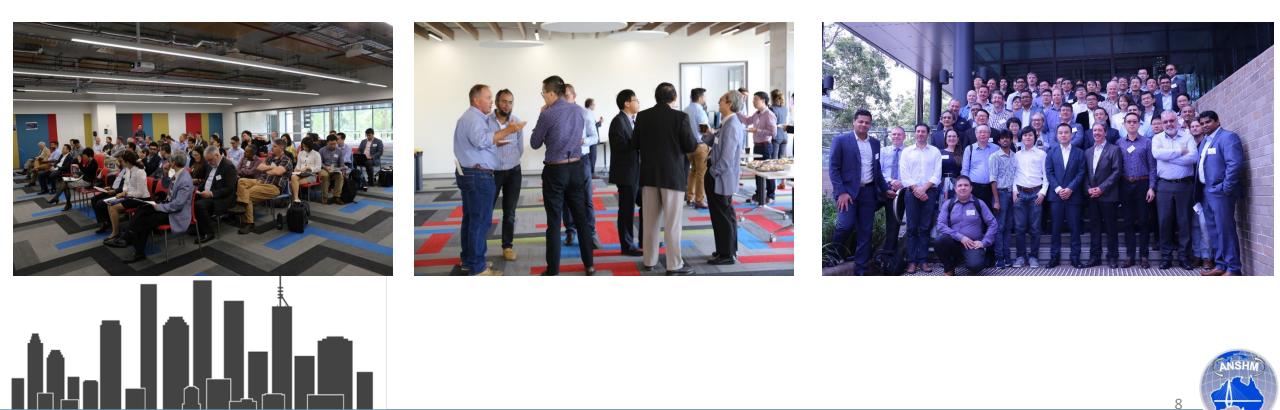
Sydney (11 Oct 2018)





ANSHM Workshops in 2018 (cont'd)

10th ANSHM Workshop which was held jointly with the 5th Workshop of the Australian Chapter of the International Association of Protective Structures (IAPS-AUS), 10-11 Dec 2018, Wollongong



ANSHM Workshop in 2019

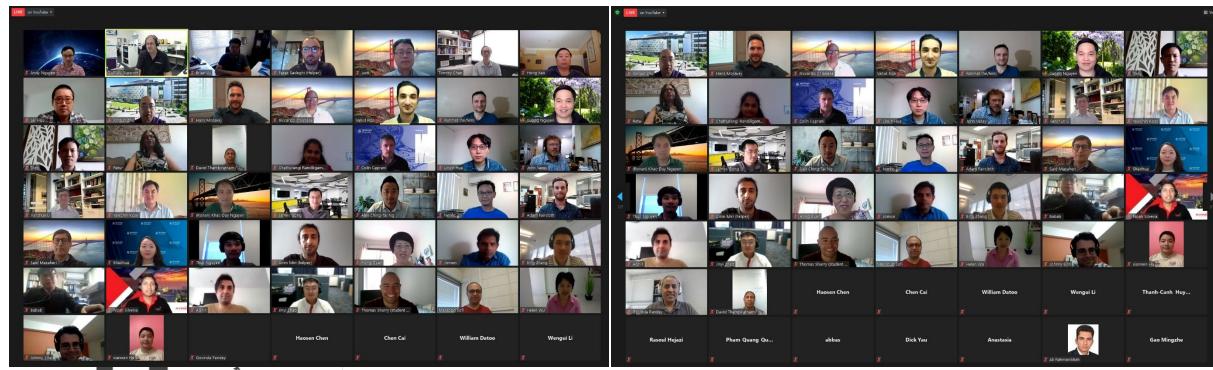
11th ANSHM Workshop to celebrate ANSHM 10th Anniversary hosted by Griffith University, 2-3 December 2019





ANSHM Workshop in 2020

12th ANSHM Workshop (online) organised by ANSHM Executive Committee, 7-8 December 2020

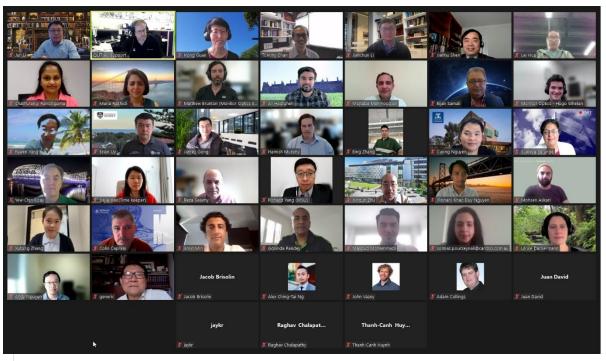






ANSHM Workshops in 2021

13th ANSHM Workshop (online) jointly organised by School of Civil and Environmental Engineering, University of Technology Sydney & School of Civil Engineering, University of Sydney on behalf of ANSHM





ANSHM Achievements

since its establishment in 2009



Recent Research Fundings Secured by ANSHM Members (A total of an amount of \$30,955,581)

- ARC Discovery Projects
 - 11 Projects for a total of ARC funding of A\$5,618,687
- ARC Linkage Projects
 - 3 Projects for a total of ARC funding of A\$1,148,385
- ARC Industry Transformation Research Hub
 - 3 Research Hubs for a total of ARC funding of A\$12,939,503
- ARC Industry Transformation Training Centre
 - 1 Training Centre for a total of ARC funding of A\$4,969,602
- ARC Laureate Fellowship
 - 1 Project awarded to Prof Hong Hao for a total of ARC funding of A\$2,253,312
- ARC Linkage Infrastructure, Equipment and Facilities Projects
 - 2 Projects for a total of ARC funding of A\$1,425,017
- ARC DECRA Projects
 - 2 Projects for a total of ARC funding of A\$780,075
 - ARC Future Fellowship Project
 - 1 Project for a total of ARC funding of A\$ 821,000
 - IMCRC Project
 - 1 Project for a total of IMCRC funding of A\$ 1,000,000





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