

# Jian ZHAO, Monash University, Australia

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Distinguished Academic Professor  
Geomechanics, Resources and Geological Engineering  
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## **University Studies and Degrees**

Undergraduate Studies, Engineering Physics, Tsinghua University, Beijing, China, 1978-79.

BSc (Hon.), Civil Engineering, University of Leeds, UK, 1983.

PhD, Engineering Rock Mechanics, Royal School of Mines, Imperial College, University of London, UK, 1987.

## **Principal Employments**

2013–, Monash University, Clayton, Australia.

Distinguished Academic Professor, Geomechanics, Resources and Geological Engineering, Department of Civil Engineering (2013–);

Vice President, Monash University – Southeast University Joint Research Institute (Suzhou) (2016–).

2005–2015, School of Architecture, Civil and Environmental Engineering, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland.

Professor of Rock Mechanics and Tunnelling, Director of Laboratoire de Mécanique des Roches (LMR), (2005–2013);

Professor and Director of Laboratoire de Mécanique des Roches (LMR), on no-pay leave (2013–2015).

1990–2005, School of Civil and Environmental Engineering, Nanyang Technological University, Singapore.

Research Fellow (1990–1993), Lecturer (1993–1994); Senior Lecturer (1994–1999);

Associate Professor and Coordinator of Underground Technology and Rock Engineering (UTRE) Programme (1999–2005).

## **Major Adjunct Academic and Professional Positions**

“The Thousand Talent Program” Distinguished Professor (2016–2019), Southeast University, Nanjing, China.

“Cheung Kong (Chang Jiang) Scholars Program” Distinguished Professor (2000–2005), China University of Mining and Technology, Xuzhou and Beijing, China.

Technical Principal (Casual) (2016–), SMEC Services Pty Ltd, Melbourne, Australia.

Chief Scientist (2016–), Trittech Underground Space Development Centre, Trittech Group Ltd, Singapore.

Independent Director (2014–2016), Terratech Group Ltd (listed on Singapore Exchange).

## **Key Academic and Professional Profiles**

Editor-in-Chief (2001–), Tunnelling and Underground Space Technology (Elsevier).

Co-Editor-in-Chief (2015–), Geomechanics and Geophysics for Geo-Energy and Geo-Resources (Springer).

Co-Editor (2006–), Geomechanics and Geoengineering – An International Journal (Taylor & Francis).

Editorial/Advisory Board Member of about 15 international and local geomechanics and related journals.

Vice President (2003–2007), International Society for Rock Mechanics (ISRM).

Executive Council Member (2001–2004), International Tunnelling and Underground Space Association (ITA).

Land and Liveability International Advisory Panel Member (2013–), Singapore Government.

Chartered Engineer (Mining) UK; Professional Engineer (Civil) Singapore.

Fellow of AusIMM, Fellow of IEAus.

## **Major Professional Awards and Honours**

“The Thousand Talent Program” State Distinguished Expert, Government of China, 2016.

ISRM Fellow, International Society for Rock Mechanics (ISRM), 2015.

Tan Swan Beng Endowed Visiting Professorship, Nanyang Technological University, Singapore, 2012.

Honorary Member, Rock Mechanics and Engineering Geology Society (Singapore), 2006.

Honorary Member, Tunnelling and Underground Construction Society (Singapore), 2006.

Prestigious Engineering Achievement Award (team), Institution of Engineers Singapore (IES), 2004.

“Cheung Kong (Chang Jiang) Scholars Program” Distinguished Scholar, Ministry of Education, China, 2000.

Richard Wolters Prize, International Association of Engineering Geology and the Environment (IAEG), 2000.

## **Core Research Interests**

Fundamental and applied researches of rock mechanics and dynamics, tunnelling, underground space technology and resources engineering.

Rock mechanics and dynamics: rock fracturing and fragmentation, dynamic failure and strength, shock wave propagation, rock dynamic testing, properties of rock fractures, particle and discrete element modelling.

Tunnelling and underground space: support of large excavations, underground space planning, TBM technology and tunnelling in difficult grounds.

Energy and resources: deep rock geothermal energy, induced seismicity in deep earth energy and resources development, mechanised excavation on mining.

## **Publication Profile**

Author or co-author of over 400 publications, including 15 book/monographs/edited volumes, and over 150 articles in ISI journals.

Publication profile can be found at Scopus and other citation systems, with Scopus h-index of 39 (28/2/2017).

## **Engineering Specialist Consulting**

Specialist consulting and expert reviewer on geotechnical engineering with applications in construction, mining, quarrying, petroleum, hydropower, earthquake, and environmental engineering, including, but not limited to: geological investigation, rock foundation and slope engineering, and underground excavation and tunnelling, groundwater and underground resources development, underground space planning and development.

Government agencies and companies being serviced include: Ministry of Environment (Singapore), Public Utility Board (Singapore), Jurong Town Corporation (Singapore), Port Authority of Singapore, Ministry of Railway (China), Chengdu Metro (China), Yunnan Road Transport Authority (China), SMEC (Australia), Ove Arup (Hong Kong), WH-STEC-AM JV (Singapore), Trittech Group (Singapore), Shanghai-Chongqing Highway Co. (China), SINTEF-Trittech-Multiconsult JV (Singapore), Herrenknecht AG (Germany), Bex Salt Mines (Switzerland), Philipp Holzmann-SembCorp JV (Singapore), Zublin (Singapore), MITIC Associate (Singapore), Fugro Geotechnics (Singapore), and others.