

# SHORT CURRICULUM VITAE

## Dr. Jayan S.Vinod

Ph.D. M.Tech., B.Tech.

### **CURRENT POSITION AND LEVEL OF APPOINTMENT**

Associate Professor

School of Civil, Mining & Environmental Engineering

### **Mailing Address:**

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### **ACADEMIC AWARDS & ACHIEVEMENTS**

- Australia-India, EMCR fellowship, Australia Academy of Science, 2017-18.
- Invited presentation, Indian Geotechnical Conference (IGC 2016), Chennai, India
- Associate Editor, Journal of Materials in Civil Engineering, ASCE, USA.
- Member, ISSMGE Technical Committee (TC105): Geo-Mechanics from Micro to Macro
- Co- Editor, International Journal of Geotechnical Earthquake Engineering (IJGEE), IGI Global, USA.
- ARC - Research Grant Proposal Assessor (Category 1) (2014- till date)
- Invited presentation, Indian Geotechnical Conference (IGC 2015) Pune, India
- Chair, Technical session, International Conference on Geotechnical Engineering, (ICGE-2015) Colombo, SriLanka
- Chair, Organising Committee, workshop on Transport and Energy Infrastructure at University of Wollongong, Nov 2014.
- Chair, Organising Committee, Workshop on Unconventional Natural Gas: Challenges and Development at University of Wollongong, Feb 2014.
- Invited "Special presentation lecture" in the Seventh International Conference on Case Histories in Geotechnical Engineering in September 2013 in Chicago, IL, USA.
- Chair, Organising Committee, International Conference on Ground Improvement and Ground Control, ICGI 2012, Wollongong, Australia.
- Invited presentation, Indian Geotechnical Conference (IGC 2011) Kochi, India
- Co-chaired a technical session at Indian Geotechnical Conference (IGC-2010), Mumbai, India.
- Co-chaired a technical session at Indian Geotechnical Conference (IGC-2008), Bangalore, India.
- Indian Geotechnical Society's IGS - Z- Tech (I) Pvt. Ltd. biennial award for the best paper published in Proceedings of Indian Geotechnical Conference, 2003.

### **MEMBERSHIPS OF PROFESSIONAL BODIES**

- Member, American Society of Civil Engineers, (ASCE)
- Member, ISSMGE Technical Committee (TC105): Geo-Mechanics from Micro to Macro
- Member, Australia Earthquake Engineering Society (AEES)
- Member, Australian Geomechanics Society (AGS)
- Member, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)
- Life member of Indian Geotechnical Society (IGS)

## **EMPLOYMENT RECORD**

- 2018- till date: Associate Professor, School of Civil, Mining and Environmental Engineering, University of Wollongong
- 2011 – 2017: Senior Lecturer, School of Civil, Mining and Environmental Engineering, University of Wollongong
- 2008 – 2011: Lecturer, School of Civil, Mining and Environmental Engineering, University of Wollongong
- 2007 – 2008: Research Fellow, School of Civil, Mining and Environmental Engineering, University of Wollongong
- 2006 – 2007: Research Associate, Department of Civil Engineering, Indian Institute of Science, Bangalore, India
- 2002: Project Associate, Department of Civil Engineering, Indian Institute of Science, Bangalore, India

## **ENGINEERING RESEARCH FIELD AND PUBLICATIONS**

### **Key research areas [Civil Geotechnical Engineering (090501)]:**

- Discrete Element Modelling of Geomaterials
- Liquefaction and Post Liquefaction Behaviour of Soils
- Ground Improvement Using Tyre Soil Mixtures
- Engineering Behaviour of Methane Hydrate Bearing Sediments

### **Publication count:**

Over **80** publications including: **37** peer- reviewed Journal article, **1** Edited Proceeding, **1** Book Chapter and **43**, referred Conference Papers.

### **Current research grants:** Following is the list of grants in which I am a chief investigator

- Mud Pumping in Heavy Haul Railroads - Assessment and Control, ARC LP 2017 \$675k
- Evaluating potential static liquefaction of tailings to prevent failures, (ARC LP -2017) \$630k
- Liquefaction and post-liquefaction behaviour of mine tailings dams, (EIS Pollination grant, 2015) (\$ 10k.
- The role of vegetation and associated root suction and reinforcement on the stabilisation of transport corridors and sloping ground (ARC LP, 2012) \$ 355k.
- Geomechanical Behaviour of methane Hydrate sediment mixtures (UIC 2012) \$6.5k
- Cyclic Behaviour of Unstable Soils Stabilised by Lignosulfonate with Special Reference to Rapid Transport Infrastructure (ARC LP 2011) \$450k
- An Investigation on the engineering behaviour of methane hydrate sediment mixture (URC, 2011) \$8k
- Geotechnical Properties and Compaction Characteristics of Granular Wastes as Potential Port Reclamation Fill (ARC LP, 2010). \$441 k

### **Research Scholars (PhD)**

- Dennis Alazigha (2015): Swelling Behaviour of Lignosulfonate treated Expansive Soils (Principal Supervisor)
- Soledad Mashiri (2015): Monotonic and Cyclic Behaviour of Sand –Tyre Chip Mixtures (Co- Supervisor)
- Rasika Athukorala (2013) : Geotechnical Characteristics of an Erodible Soil stabilised by Lignosulfonate: An Analytical Perspective (Principal Supervisor)
- Syed Karim Hussaini (2013): An Experimental Study on the Deformation Behaviour of Geosynthetically Reinforced Ballast (Co- Supervisor)
- Pramod Thakur (2011): Cyclic Densification of Ballast and Associated Deformation and Degradation (Principal Supervisor).

## **PROFESSIONAL CONTRIBUTIONS TO EDUCATION DEVELOPMENT**

- Undergraduate Subjects: CIVL462: Principles of Foundation Engineering, CIVL463: Applied Geotechnical Engineering, ENGG105: Design for Sustainability
- Postgraduate Subject: Advanced Foundation Engineering (CIVL909)
- Online virtual laboratory experiments for geotechnical courses