

# Manu K. Mohan

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Department of Civil Engineering  
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## Personal Information

**Gender** : Male  
**Nationality** : Indian  
**Date of birth** : April 24, 1993  
**Marital status** : Single

## Education

- 2016-present **Master of Science in Civil Engineering**, *Indian Institute of Technology Madras*, Chennai, India.  
Thesis: *Development of pre-packaged, cementitious grouts for post-tensioned concrete systems*  
Guide: Dr. Radhakrishna G. Pillai.
- 2011-2015 **Bachelor of Technology in Civil Engineering**, *Government Engineering College*, Thrissur, India.  
Project: *Structural analysis and design of the chemical engineering department building of National Institute of Technology (NIT) Warangal.*  
Guide: Dr. Anandavally M. K.

## Research/Project Experience

- 2016-present **Graduate Research scholar**, *Indian Institute of Technology Madras*, India.
- Developed a novel pre-packaged, high performance, cementitious grout for post-tensioning applications (Government of India sponsored project (IMPRINT)).
  - Mentored two Master of Technology students with their graduate project
  - Mentored two summer interns
- 2011-2015 **Undergraduate student**, *Government Engineering College Thrissur*, India.
- Undergraduate project: Structural analysis and design of the chemical engineering department building of National Institute of Technology (NIT) Warangal.
  - Designed and developed a prototype tuned mass damper for high rise buildings. Also, the effectiveness of liquid sloshing mass damper and tuned mass damper were analysed and compared. (Won best project award in a national level project expo.)
  - Designed different types of concrete (light weight, porous, high strength etc.) and secured first place in numerous national level competitions
  - Presented a technical paper "Sustainable building design using Building Information Modelling (BIM)" in annual conference conducted by Indian Society of Technical Education (ISTE) held at TKM college of engineering, INDIA.

## Published/Accepted Papers

Peer reviewed conference proceedings and posters

- **Mohan, M. K.**, Pillai, R. G., Santhanam M., and Gettu R., "Fresh properties of the Cementitious Grouts for Post-Tensioning Applications," International RILEM workshop on Rheological Measurements of Cement Based Materials (IRWRMC), University of Artois, Arras, France, May 30-31, 2018.
- **Mohan, M. K.**, Pillai, R. G., Santhanam M., and Gettu R., "Development of pre-packaged cementitious grouts for post-tensioning applications," Proceedings of the 4th International Conference on Service Life Design for Infrastructures (SLD4), RILEM week 2018, TU Delft, The Netherlands, August 26-29, 2018. (Paper accepted for the proceedings).
- **Mohan, M. K.**, Pillai, R. G., Santhanam M., "Fresh properties of High Performance Grouts (HPGs) for post-tensioned systems- A Review of past work at IIT Madras", Poster presentation, RILEM week 2017, Chennai, India, September 4-7, 2017.

## Papers in preparation

- **Mohan, M. K.**, Pillai, R. G., Santhanam M., and Gettu R., "Development and performance assessment of pre-packaged cementitious grouts for post-tensioning applications," Construction and Building Materials. (will be completed by August 2018).
- Provisional patent filing for the 'High performance, pre-packaged cementitious grout for post-tensioned concrete structures' is under process.

## Graduate level course work

- Modern Construction Materials
- Advanced Concrete Technology
- Maintenance and Rehabilitation of Construction Facilities
- Characterization of Construction Materials
- Rheology of Civil engineering Materials
- Mechanics of Viscoelastic Materials
- Rheology of Complex Fluids

## Additional experience/Awards

- Secured 99.5 percentile for the Graduate Aptitude Test in Engineering (GATE) in 2016 among 120,000 students nationwide.
- Secured 1<sup>st</sup> prize for working model (Title: 'The concepts and postulates on the geometry of circles') in the Southern India Science Fair (SISF) conducted by Indian Space Research Organisation (ISRO) and Government of India in January 2007 at Hubli, India.
- Secured 1<sup>st</sup> prize for working model event in the Kerala state science fair in a periods of 2005-2009 conducted by Government of Kerala, India.
- National Service Scheme (NSS) volunteer and conducted classes for school students.
- Won Rashtrapati scout award in 2008 (highest scout award in India)
- Participated in 2<sup>nd</sup> International convention of (SPIC MACAY) at in February 2013, conducted at IIT Madras.

## Leadership/Team work experience

- Research Councilor of department of civil engineering for the year 2016-2017.
- Key member of the organizing team of the 71<sup>st</sup> annual RILEM week and International Conference in Advances in Construction Materials and Systems (ICACMS 2017) held at The Leela Palace convention

center and IIT Madras, Chennai in September 2017.

- Key member of the organizing team of a two-day workshop on 'Corrosion Control in Concrete structure (C3S)' conducted at IIT Madras in August 2016.
- Organizer of Research Expo event in the annual national level research fest 'Research Scholar's day, (RSD)', in April 2017 conducted at IIT Madras.
- Organizer for the national level technical fest 'Dyuthi' in September 2015 conducted at GEC Thrissur.
- Key member of the organizing team of the 'CEA Fest', an annual national level technical fest conducted by Civil Engineering Association (CEA) of IIT Madras in 2017 and 2018 held at IIT Madras.
- Student member of technical organizations:
  - American Concrete Institute (ACI)
  - American Society of Civil Engineers (ASCE)
  - National Association for Corrosion Engineers (NACE)
  - Indian Concrete Institute (ICI)
  - Indian Society of Technical Education (ISTE)

## Other skills

Language Malayalam (Mother Tongue), English, and Hindi.

Software and programming MATLAB, C++, AUTOCAD, STAAD Pro, Latex, MS office.

## Interests

Technology Physics; Geography; Human interaction.

Creativity Music; Flute; Violin.

## References

- **Dr. Radhakrishna G. Pillai**  
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Indian Institute of Technology Madras, Chennai, India.  
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- **Prof. Manu Santhanam**  
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- **Prof. Ravindra Gettu**  
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