

# Priyansh Singh, Ph.D.

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## Employment History

- Jun 2020 – till date    📌 **Assistant Professor** Civil Engineering Department, Indian Institute of Technology Indore
- Feb 2019 – Jun 2020    📌 **Assistant Professor** Civil Engineering Department, Birla Institute of Science and Technology Pilani
- July 2018 – Feb 2019    📌 **Visiting Faculty** Civil Engineering Department, Birla Institute of Science and Technology Pilani

## Education

- 2013 – 2019    📌 **Ph.D., Indian Institute of Technology Delhi** in Pavement Materials.  
Thesis title: *Characterization of resistance aggregate degradation and rutting of asphalt mixtures*  
More details at <http://eprint.iitd.ac.in/bitstream/handle/2074/8057/TH-5842.pdf>
- 2011 – 2013    📌 **M.Tech. Indian Institute of Technology Guwahati** in Transportation System Engineering.  
Thesis title: *Determination of Mixing and Compaction Temperatures of Asphalt Concrete Mixes.*
- 2007 – 2011    📌 **B.E. Civil Engineering, Jabalpur Engineering College.**

## Research Publications

### Dissertations

- 1 Singh, P. (2019). *Characterization of resistance aggregate degradation and rutting of asphalt mixtures* (Doctoral dissertation, IIT Delhi, New Delh, India). 🌐 <http://eprint.iitd.ac.in/bitstream/handle/2074/8057/TH-5842.pdf>
- 2 Singh, P. (2013). *Determination of mixing and compaction temperatures of asphalt concrete mixes* (Master's thesis, IIT Guwahati).

### Journal Articles

- 1 Singh, P. & Swamy, A. K. (2019a). Effect of aging level on viscoelastic properties of asphalt binder containing waste polyethylene. *International Journal of Sustainable Engineering*, 12(2), 141–148.
- 2 Singh, P. & Swamy, A. K. (2019b). Investigation of aggregate degradation in asphalt concrete mixtures during impact compaction. *Advances in Civil Engineering Materials (Accepted)*.
- 3 Singh, P. & Swamy, A. K. (2019c). Probabilistic characterisation of damage characteristic curve of asphalt concrete mixtures. *International Journal of Pavement Engineering*, 20(6), 659–668.
- 4 Singh, P. & Swamy, A. K. (2018). Probabilistic approach to characterise laboratory rutting behaviour of asphalt concrete mixtures. *International Journal of Pavement Engineering*, 1–13.
- 5 Singh, P., Tophel, A., & Swamy, A. K. (2017). Properties of asphalt binder and asphalt concrete containing waste polyethylene. *Petroleum Science and Technology*, 35(5), 495–500.

### Conference Proceedings

- 1 Singh, P. & Swamy, A. K. (2017a). Degradation of asphalt mixtures due to impact method of compaction. In *Bearing capacity of roads, railways and airfields - proceedings of the 10th international conference on the bearing capacity of roads, railways and airfields, berra 2017* (pp. 243–249). 🌐 [www.scopus.com](http://www.scopus.com)

- 2 Singh, P. & Swamy, A. K. (2017b). Development of probabilistic rutting curve from wheel tracking device data. In *International conference on advances in construction materials and systems: 3rd–8th December 2017*. RILEM 2017. Chennai, India.
- 3 Singh, P. & Swamy, A. K. (2017c). Use of wlf equation to capture short term aging characteristics of asphalt binder. In *International conference on advances in construction materials and systems: 3rd–8th December 2017*. RILEM 2017. Chennai, India.
- 4 Singh, P. & Swamy, A. K. (2015). Influence of aggregate gradation on permanent deformation characteristics of asphalt concrete. In *3rd conference of the transportation research group of india (3rd ctrg): 17th–20th December 2015*. 3rd CTRG 2015. Kolkata, India.
- 5 Singh, P. & Choudhary, R. (2014). Determination of mixing and compaction temperatures of asphalt concrete mixes by density analysis. In *International conference on sustainable civil infrastructure by asce india section: 17th–18th October 2014*. ICSCI 2014. Hyderabad, India.

## Books and Chapters

- 1 Swamy, A. K. & Singh, P. (2017). Creating sustainable transportation system in india—materials engineer perspective. In *Mobility engineering* (pp. 87–90). Springer.

## Skills

Languages	■ Strong reading, writing and speaking competencies for English & Hindi.
Coding	■ Java, R, L <sup>A</sup> T <sub>E</sub> X, ASP.NET,.NET, C#.NET, Matlab, Mathematica.
Academic	■ Pavement Materials, Numerical Modeling, Pavement Maintenance, Highway Construction, Pavement Design, Road Safety, Alternative Materials etc.
Misc.	■ Academic research, teaching, training, consultation, L <sup>A</sup> T <sub>E</sub> X typesetting and publishing.

## Invited Talks

- 07/08/2020 ■ **TEQIP III Sponsored One-Day National Webinar on Recycling : A Way to Sustainable Paving**, University College of Engineering & Technology, Bikaner [Constituent college of Bikaner Technical University, Bikaner] Bikaner, Rajasthan 334001
- 08/07/2020 ■ **Performance Requirements for Asphalt Mix Design**, Webinar organised by Civil Engineering department of Dr. B. C. Roy Engineering College Durgapur.

## Miscellaneous Experience

### Workshop/ Short Courses Attended

- 2013 ■ **QIP Short term course on ‘Advanced Topics in Solid Mechanics applied to Civil Engineering’**, 17 - 21 December 2013 at Indian Institute of Technology Delhi
- 2014 ■ **QIP Short term course on ‘Traffic Data collection methods and technologies’**, 19-23 May 2014 at Indian Institute of Technology Delhi
- 2015 ■ **25th International Course on Transportation Planning and Safety in New Delhi, India**, 29 November - 02 December 2015 held at Indian Institute of Technology Delhi
- 2015 ■ **International Symposium on Transportation Planning and Safety**, December 03 - 05, 2015, held at Indian Institute of Technology Delhi
- 2016 ■ **DST-IIT Madras Dissemination Workshop on ‘Development of Warrants for use of Modified Binders for Improved Performance of Flexible Pavement**, October 24-25, 2016 at Indian Institute of Technology Madras

## Miscellaneous Experience (continued)

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### Professional Membership

- Associate Member (A.M. ASCE), American Society of Civil Engineers.
- Student Member (S.M.), Indian Road Congress
- Student Member (S.M.), International Association of Engineers (IAENG)

### Awards and Achievements

- 2018 ■ CSIR Travel Grant to attend International Conference.
- 2018 ■ IRD, IIT Delhi Travel Grant to attend International Conference.
- 2013-18 ■ M.H.R.D. Fellowship for PhD.
- 2011-13 ■ M.H.R.D. Fellowship for M.Tech.
- 2006 ■ Got 'Master Mind of the Year' Award by Nav Bharat Times
- 2006 ■ Got First position in the State Science Fair organized by NCERT
- 2004 ■ Got Several Prizes in Block level competition organized by VYAPAM, Bhopal. (Essay writing, debate, Group Acting)
- 2003 ■ Got third price in Bal Rang, MP State Gov. Cultural Program in Group Acting.

## References

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Available on Request