

Dr. Uttam Kumar Pandit

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🎂 10 April 1993

♂ Male

🏠 OBC-NCL



Education

- 2020 – 2025 **Ph.D., Indian Institute of Technology, Bhubaneswar** in Structural Engineering.
Thesis title: *Efficient Homogenization-Based Modeling of Corrugated Sheet with a Focus on Stability and Shear Design of Corrugated Steel Web Girder*. CGPA: 7.8/10.
• PhD Supervisor: **Dr. Goutam Mondal and Dr. Devesh Punera**
- 2016 – 2018 **M.Tech , National Institute of Technology, Uttarakhand** in Structural engineering.
Thesis title: *Some Studies on Non Local Functionally Graded Beams Theory*.
CGPA: 8.18/10.
• M.Tech Supervisor: **Dr. Amardeep Dahiya and Dr. Devesh Punera**
- 2011 – 2015 **B.E, Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal** in Civil Engineering.
Thesis title: *Rubberize Concrete*.
CGPA: 7.5G/10.



Professional and Research Experience

- 2018-2020 **Lecturer**. R.P. Sharma Institute of Technology (RPSIT), Patna, India.
- July 2025- October 2025 I served as a Teaching Assistant for the NPTEL course Advanced Structural Analysis.
- May 2025- November 2025 Employed as a Research Assistant at the IIT Bhubaneswar.
- November 2025- March 2026 Currently working as a Structural Engineer at the Infradymaix Stiffness Monitoring Pvt Ltd.
- March 2026- Present Currently working as a Assistant Professor at the Baba Farid College Of Engineering & Technology, Bhatinda, India.

Awards and Achievements




- 2016 **Secured 94.18 percentile in Graduate Aptitude Test Exam in Civil Engineering (GATE 2016).**
Recipient of Ministry of Human Resource Development scholarship, Civil Engineering, National Institute of Technology Uttarakhand, India.
- 2020 **Recipient of Ministry of Human Resource Development scholarship for carrying out PhD at Indian Institute of Technology Bhubaneswar, India.**

Certification

- 2024  **Certificate of Participation.** Completed a short-term certificate-based training program on survey, investigation, and preparation of DPR for bridges in rural roads by Indian Institute of Technology, Bhubaneswar.
-  **Certificate of Participation.** Completed a short-term certificate-based course on structural fire engineering organized by the Indian Institute of Technology, Bhubaneswar.

Research Publications

Journal Articles

- 1 U. K. Pandit, G. Mondal, and D. Punera, "Investigating the static, free vibration, and buckling responses of corrugated steel plate-made structures using efficient homogenization-based fe modelling," vol. 70, p. 107 643, 2024.  DOI: <https://doi.org/10.1016/j.istruc.2024.107643>.
- 2 U. K. Pandit, G. Mondal, and D. Punera, "Recent review and comparative assessment of local instability in thin-walled corrugated steel web girders," *International Journal of Structural Stability and Dynamics*, p. 2 530 002, 2024.  DOI: <https://doi.org/10.1142/S0219455425300022>.
- 3 U. K. Pandit, G. Mondal, and D. Punera, "Lateral torsional buckling analysis of corrugated steel web girders using homogenization approach," *Journal of Constructional Steel Research*, vol. 210, p. 108 099, 2023.  DOI: <https://doi.org/10.1016/j.jcsr.2023.108099>.

Journal Articles

- 1 U. K. Pandit, G. Mondal, and D. Punera, "Assessing the suitability of analytical homogenization schemes for corrugated sheets: Insights from experiments and numerical simulations," Under Review, 2026.
- 2 U. K. Pandit, G. Mondal, and D. Punera, "Reliability-based shear design and safety assessment of corrugated steel web girders," Under Review, 2025.
- 3 U. K. Pandit, D. V. Jibhakate, G. Mondal, and D. Punera, "Seismic response of stiffened-opening corrugated steel plate shear walls in rc frames," Under Review, 2025.
- 4 U. K. Pandit, G. Mondal, and D. Punera, "Global stability assessment of corrugated steel web girders: A state-of-the-art review," Under Review, 2025.
- 5 B. Soni, U. K. Pandit, D. V. Jibhakate, G. Mondal, and D. Punera, "Lateral response of hybrid rc frame-corrugated steel shear walls with opening," Under Review, 2025.

Conference Proceedings

- 1 U. K. Pandit, G. Mondal, and D. Punera, "A comprehensive study on the applicability of homogenization-based modeling in elastic buckling analysis of corrugated steel," in *10th International Congress on Computational Mechanics and Simulations (ICCMS-2025)*, Bhubaneswar, India, 2025.
- 2 D. V. Jibhakate, U. K. Pandit, G. Mondal, and D. Punera, "Effect of varying corrugation parameters of corrugated infill with rc frame using pushover analysis," in *1st International Conference on Advanced Technology in Material Science and Engineering (ICATMSE-24)*, Bhubaneswar, India, Apr. 5–6, 2024.
- 3 U. K. Pandit, D. V. Jibhakate, G. Mondal, and D. Punera, "Influence of corrugation orientation on the elastic buckling capacity of corrugated steel plate shear walls," in *1st International Conference on Advanced Technology in Material Science and Engineering (ICATMSE-24)*, Bhubaneswar, Odisha, India, Apr. 5–6, 2024.

- 4 U. K. Pandit, G. Mondal, and D. Punera, "Homogenization-based numerical analysis of corrugated steel infill walls under lateral loading," in *18th World Conference on Earthquake Engineering (18WCEE-24)*, Milan, Italy, Jun. 30–Jul. 5, 2024.
- 5 U. K. Pandit, G. Mondal, and D. Punera, "Homogenization-based efficient 1d finite element modelling of a corrugated steel web i-girder," in *1/th Structural Engineering Convention (1/SEC-2/)*, Nagpur, India, Dec. 7–9, 2023.

Technical Skills

Coding  Matlab
Software Expertise  Abaqus, ETAB, SAP2000, MS Office, Latex, and AutoCAD

Research Interests

Finite element analysis, Homogenization techniques for thin-walled structure, Structural reliability analysis, Computational mechanics, instability of steel structure, Seismic behavior of structures, Composite structure

Personal Information



Linguistic Abilities: English, Hindi, Bhojpuri
Marital Status: Married
Nationality: Indian
Hobbies: Learning new things, playing chess, and listening to music

References

References available on request



Dr. Goutam Mondal

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Dr. Devesh Punera

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