**Faculty Profile**

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1. **Basic Information**

* **Name**: Dr. Bhupesh Kumar Chandrakar
* **Designation**: Assistant Professor
* **Department/School**: Mechanical Engineering Department
* **Institution Name**: Shri Shankaracharya Institute of Professional Management and Technology
* **Email ID**: bhupesh01@ssipmt.com
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* **Orcid ID**: <https://orcid.org/0009-0000-7083-4199>
* **Google Scholar**: https://scholar.google.com/citations?user=B8FvXrkAAAAJ
* **Linkedin**: https://[www.linkedin.com/in/bhupe](http://www.linkedin.com/in/bhupe) sh-kumar-chandrakar-401a46115/?originalSubdomain=in
* **Web of science Research ID**: **GSJ-3438-2022**

<https://www.webofscience.com/wos/author/record/GSJ-3438-2022>

* **Researchgate:** https://www.researchgate.net/profile/Bhupesh-Chandrakar

1. **Educational Qualifications**

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| **Degree** | **Specialization** | **Institution** | **Year of Completion** |
| UG | Mechanical | MPCCET, Bhilai | 2010 |
| PG | CAD/CAM, ROBOTICS | CCET, Bhilai | 2015 |
| Ph.D. | Mechanical (Design) | NIT, Raipur | 2024 |
| Others | *(if applicable)* |  |  |

1. **Teaching & Research Experience**

* **Total Teaching Experience**: 08 Years
* **Industry Experience**: *(if any)*
* **Research Experience**: 6 Years

1. **Courses Taught**

Machine Design-I and II, Basic Mechanical Engineering, Engineering Thermodynamics, Applied Thermodynamics, Engineering Mechanics, CAD-CAM, and Robotics.

1. **Research Interests / Specialization**

* Solid Mechanics
* Vibration analysis
* Nonlinear vibration analysis of cracked plates
* Smart materials and fluid-structure interaction
* Analytical modeling in mechanical vibrations

1. **Publications (Last 5 Years)**

* Journals (APA/IEEE format): 06 SCIE

1. Chandrakar, Bhupesh K., N. K. Jain, and Ankur Gupta. "Non-linear vibration analysis of specially orthotropic tapered micro-plates with arbitrary located crack: A non-classical analytical approach." Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 236.3 (2022): 1406-1429.
2. B. K. Chandrakar, N. K. Jain, and A. Gupta, “Fiber orientation effects on the non-linear vibrations for a microstructure- dependent tapered plate containing an arbitrarily located crack,” Mech. Based Des. Struct. Mach., vol. 51, no. 8, pp. 4368–4405, 2021, doi: 10.1080/15397734.2021.1966305.
3. Chandrakar, Bhupesh K., N. K. Jain, and Ankur Gupta “Nonlinear vibration analysis of specially orthotropic micro-plates with partial crack and varying thickness submerged in fluid”, Journal of Vibration Engineering & Technologies (JVET), 2024, 1-35.
4. Chandrakar, Bhupesh Kumar, Nitin Kumar Jain, and Ankur Gupta. "Nonlinear vibration analysis of a generally orthotropic cracked micro-plate with variable thickness considering fiber effects and fluid-structure interaction." Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering (2025): 09544100251331288.
5. Chandrakar, Bhupesh Kumar, N. K. Jain, and Ankur Gupta. "Nonlinear vibration analysis of a cracked isotropic plate with varying thickness coupled with fluid." Journal of the Brazilian Society of Mechanical Sciences and Engineering 47.7 (2025): 1-34.

1. Singh, P., Jain, N. K., Gupta, A., & Chandrakar, B. K. (2025). Non-classical thermal vibration analysis of tapered isotropic plates with partial crack. Mechanics Based Design of Structures and Machines, 1-28.

* Conference Proceedings:

Total = 02

**(Last 5 Years)** = 0

1. B. K. Chandrakar, N. K. Jain, and A. Gupta, “CONGRESS OF ISTAM Section Code: SM6, Effect of crack orientation on vibration characteristics of a partially cracked isotropic plate with linearly varying thickness: An Analytical Approach”.
2. A. Gupta, N. K. Jain, and B. K. Chandrakar, “CONGRESS OF ISTAM Section Code: SM6, Analytical modeling for vibration analysis of tapered isotropic micro-plate containing arbitrary oriented partial crack using modified couple stress theory.”

* Book Chapters / Books Authored (02)

1. Chandrakar, Bhupesh Kumar, N. K. Jain, and Ankur Gupta. "Crack Orientation Effects on Vibration Characteristics of Bi-directional Linearly Varying Thickness Partially Cracked Isotropic Micro-plate: An Analytical Approach." Processing and Characterization of Materials. Springer, Singapore, 2021. 315-323.
2. Jain, Nitin Kumar, and Bhupesh Kumar Chandrakar. "Nonlinear Vibration Analysis of Specially Orthotropic Tapered Plate with Arbitrarily Oriented Crack: An Analytical Approach." International Conference on Nonlinear Dynamics and Applications. Cham: Springer Nature Switzerland, Vol. 01, 2023: 555-565.
3. **Research Guidance**

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| **Level** | **Awarded** | **Ongoing** |
| Ph.D. | Nil | Nil |
| PG | Nil | Nil |

1. **Awards & Recognitions**

* Nil

1. **Administrative Roles**

* Nil

1. **Professional Memberships**
2. Lifetime membership of the “Indian Society of Theoretical Science and Applied Mechanics (ISTAM)”.
3. Lifetime membership of the “The Institution of Engineers India (IEI)”.