

Kabilan Baskaran

Assistant Professor • Mechanical Engineering • Indian Institute of Technology
Dhanbad

9600266549 • kabilan@iitism.ac.in

POSITIONS

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| Assistant Professor, | 2022 - present |
| Indian Institute of Technology Dhanbad, Department of Mechanical Engineering | |
| Post-Doctoral Research Associate, | 2020-2022 |
| University of Bristol, UK, Mechanical Engineering | |
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EDUCATION

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| Ph.D. and M.S. Mechanical Engineering, Indian Institute of Technology Madras | 2021 |
| Thesis Supervisor: Prof. K. Srinivasan | |
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HONORS & AWARDS

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| Institute Research Award, "Aeroacoustic characteristics and noise control of pipe-cavity jets", PhD Thesis, 2021 |
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PROJECTS & GRANTS

- *Empowerment and Equity Opportunities for Excellence in Science Grant (EEQ),* (PI, 2023-2026)
Project Title: Aerodynamic and aeroacoustic characteristics and noise control of isolated and tandem propellers with and without installations
Amount: ₹ 3684298
Funding agency: Anusandhan National Research Foundation (ANRF)
- *Core Research Grant (CRG),* (PI, 2023-2026)
Project Title: On the reductions of airfoil-turbulence noise through novel dimple configurations
Amount: ₹ 5330195
Funding agency: Anusandhan National Research Foundation (ANRF)
- *Internal Pump-Priming Grant,* (PI, 2021)
Project Title: Study of Unsteady Jet Screech Resonance Using Schlieren Flow Visualization
Amount: £ 5000
Funding agency: University of Bristol

PROFESSIONAL ACTIVITIES

- Guest editor for **International Journal of Aeroacoustics**, 2025, *Special issue: Cutting-edge research in aeroacoustics: challenges and innovations*
- Associate editor for **Noise & Vibration Worldwide** journal

INVITED LECTURES AND SEMINARS

- Delivered seminar presentation on *Aerodynamics of drones* in bootcamp training program on unmanned aircraft systems at Indian Institute of Technology Dhanbad, May, 2023
- Delivered lecture on *Jet Flow and Acoustics* as a part of lecture series on experiments in jet flows at SRM institute of science and technology, Chennai, Jan, 2020.

THESIS SUPERVISION

Bachelors

- Effect of passive flow control on noise reduction in axisymmetric cavity flows: a computational study (*Ms. Harshitha and Ms. Bharghave, 2023-2024*)
- Effect of confinement on flow characteristics in a tapered cylinder (*Mr. Herambh, Mr. Dheeraj Kumar, Mr. Akula and Mr. Divyansh, 2023-2024*)

Masters

- Impact of finite wing turbulence ingestion on propeller aeroacoustics (*Mr. Vikash Kumar, 2024-2025*)
- Computational investigation of aerodynamic performance of propellers with varying pitch angles (*Mr. Abhishek Misra, 2023-2024*)
- Large-eddy simulation of intermittency in turbulent axisymmetric cavity flows (*Mr. Praveen Kumar, 2023-2024*)

PhDs

- Aerodynamic and aeroacoustic analysis of isolated and tandem propellers with noise control [*Mr. Hansdev Paswan, 2022-2026 (expected)*]
 - On the reductions of airfoil-turbulence noise through novel dimple configurations [*Mr. Mithilesh Kumar Singh, 2023-2027 (expected)*]
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