Dr. Raghvendra Upadhyay (Ph.d.)
Associate Professor

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Professional Qualification:

- **Ph.D in Mechanical Engineering, 2019**
  PDPM Indian institute of Information Technology Design & Manufacturing, Jabalpur, Madhya Pradesh, India
- **Master of Technology 2009**
  Motilal Nehru National Institute Technology Allahabad, Prayagraj
- **Bachelor of Engineering, 2003**
  Rewa Engineering College, Rewa, RGPV Bhopal, MadhyaPradesh

Short Biodata:

I am a person belongs to the vicinity of great Vundhya region. I can compile all mechanical engineering related undergraduate subjects but at present my fields of interest are subjects like Computational fluid dynamics, Finite element analysis, IOT, Python Programming, Drone and Electrical vehicle. I take friendly and logical approach towards solving a problem from the very basics to the advanced version.

Major Subjects:

- Python Programming, Fluid Mechanics and Heat Transfer, Oil Hydraulics & Pneumatics, Sensors and Actuators

Citation Analysis:

37 citations (h-index 4 and i10-index 1) in google scholar
https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=EbePynAAAAAJ

List of Publication:

Journal Publications:

1. R. Upadhyay, N. Raghuvanshi, G. Dutta, (2023), "Nuclear coupled thermal-hydraulic analysis of parallel channel density wave instabilities in a supercritical water reactor", Annals of Nuclear Energy, 181, 109495.
   https://doi.org/10.1016/j.anucene.2022.109495.

2. S. Rai, N. Ahlawat, R. Upadhyay, P. Kumar, (2022) "Effect of geometry and operating parameters on density wave oscillations in supercritical natural circulation loop", Computation, 10(2), 25. https://doi.org/10.3390/computation10020025.

3. S. Rai, G. Kumar, S. Suman, R. Upadhyaya, N. Raghuvanshi, M. Gupta, S.Shah S. Alam (2022) "A state of art review of instability in parallel channels of supercritical fluid in nuclear applications", MATERIALS TODAY-PROCEEDINGS, 62, 226-232 https://doi.org/10.1016/j.matpr.2022.02.648.

4. N. Raghuvanshi, R. Upadhyay, (2021), "Steady-state and Nonlinear Stability Analysis of a Single-phase Rectangular Natural Circulation Loop", Journal of Emerging Technologies and Innovative Research (JETIR), 8(10), 1-8. https://www.jetir.org/view?paper=JETIRFD06001

5. R Wadile, R. Upadhyay, (2021) "Thermal Analysis of a Disc", International Journal for Research in Applied Science & Engineering Technology (IJRASET), 9, 1910-15. https://doi.org/10.22214/ijraset.2021.38476

6. R. Upadhyay, G. Dutta, (2020) "Numerical analysis of parallel channel density wave instabilities in a supercritical water reactor", Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE), 42, 131. https://doi.org/10.1007/s40430-020-2211-z.

7. R. Upadhyay, G. Dutta, (2018) "Identification of safe and stable zone of operation in supercritical water reactor", Nuclear Engineering and Design, 328, 209-2027. https://doi.org/10.1016/j.nucengdes.2017.12.013

8. R. Upadhyay, S.K. Rai, G. Dutta, (2018), "Numerical analysis of density wave instability and heat transfer deterioration in a supercritical water reactor", Journal of Mechanical Science and Technology, 32 (3), 1063-1070. https://doi.org/10.1007/s12206-018-0208-7

9. R. Upadhyay, G. Dutta, M. K. Singh, D. Bera and N. Srivastava, (2014), "A Numerical Solution of the Point Kinetics Equations and its Validation", Mathematical Sciences International Research Journal, 3, 993-1005.

Research and Scholarly Contributions:

- ☐ **Ph.D. Research**: Nuclear coupled Thermal Hydraulic Analysis of Supercritical Water Reactor.
- ☐ **M. E. Research**: Modeling the Hydraulics of Ground Water Recharge.

Software Tools:

1. Ansys, Fluent, AutoCAD

Experience:

☐ Associate Professor, Mechatronics Engineering, Terna Engineering College, Navi Mumbai, Maharashtra, India, December 2019- till date.

☐ Assistant Professor, Mechanical engineering, G.H. Raisoni College of Engineering, Nagpur, Mharashtra, India, July 2018-November 2019.
☐ Assistant Professor, Mechanical engineering, Jaypee University of Engineering and Technology, Raghogarh, Guna (M.P.), India, March 2010- June 2012.
☐ Assistant Professor, Mechanical engineering, Aditya College Technology and Science, Satna (M.P.), India, July 2009- February 2010.
☐ Lecturer, Mechanical engineering, Vindhya Institute of Technology and Science, Satna (M.P.), India, September 2004- June 2007

Talks/Guest Lectures Delivered:

1. Delivered expert lecture on Drone Technology, Organised by Department of Mechanical Engineering, Faculty of Engineering & Technology, Oriental college, Bhopal, India held on September 30, 2021.
2. Delivered Expert Lecture on Drone Technology in Webinar held on May 30, 2020, Organised by Department of Mechanical Engineering, Faculty of Engineering & Technology, AKS University, Satna, India .
3. Organised one week hands on workshop for engineering students on Drone Development during 09.12.2019 to 14.12.2019 at Terna engineering college, Navi Mumbai, India .
4. Delivered theoretical and hands on practical sessions in ICAMEE-2019 Pre Conference Workshop on PV System & Drone Designing held on 23rd August 2019 at GH Raisoni college of engineering, Nagpur, India.

SESSION CHAIR/JUDGE:

1. 'Judge' for Selection Round of 16th Inter Collegiate/Institute/Department Avishkar Research Convention: 2021-22 (Selection Round) organized by Department of Students' Development, University of Mumbai for Engineering and Technology.

Declaration
I hereby declare that the foregoing information are correct and complete to the best of my knowledge.

Dr. Raghvendra Upadhyay

Place: Navi Mumbai