(Curriculum Vitae)

Prof. Suraj Kumar Behera

Mailing Address:

Department of Mechanical Engineering
NIT Rourkela, Rourkela -769008
ODISHA(INDIA)
Phone: +91-661-2462508(O)
Mail id: beherask@nitrkl.ac.in and suraj.behera@gmail.com

Areas of Interest

- Design and development of bearings (Hydrodynamic, Hydrostatic, Aerostatic and Aerodynamic)
- Rotordynamics of high-speed rotors (Rotors of turbomachinery such as turboexpander, turbocharger, Turbogenerator etc.)
- Vibration based condition monitoring and machine learning.
- Digital twins of rotating machineries.
- Design of Cryogenic equipment such as turboexpander, Cryocooler and Dewar.

Education

- 10^{th} , Sainik School Bhubaneswar, 1992
- 12^{th}, Sainik School Bhubaneswar, 1994
- Bachelor's Degree, REC, Rourkela (NIT, Rourkela), 1999.
- Master's Degree, Indian Institute of Technology, Kanpur, 2003.
- Doctor of Philosophy Degree, NIT Rourkela, 2018.

Consultancy Projects

#	Project Title	Sponsoring Industry	Amount (INR)	Status	Role
1	Design of the Radial Turbine and associated parts for Turbogenerator	Muteki Automação Ltda, Brazil	1,74,110	Completed	PI
2	Interference Fit of Lower Spindle and Coupling Seat	SAIL, Rourkela	NIL	Completed	PI

Research Projects

#	Project Title	Sponsoring Agency Name	Amount (INR)	Status	Role
1	Experimental investigation on the performance of various optimized micro-grooved water-lubricated bearing for the rotors used in underwater vehicles and machinery	IIT Guwahati Technology Innovation and Development Foundation	14,50,000	Ongoing	PI

2	Nonlinear Analysis and Performance Measurements of a Locomotive Turbocharger Supported on Grooved Bearings	DST,SERB	23,89,250	Ongoing	PI
3	Design, Optimisation and Experimental Investigation of High Speed Turbomachinery Rotor Supported on Gas Foil Bearing	Science and Engineering Research Board ,SERB	28,40,100	Ongoing	PI
4	Use of ground source energy as an alternative to air conditioning.	Dept. of Planning and convergence, Govt. of Odisha	5,00,000	Completed	PI
5	Development of cylindrical pneumatic bump formation machine for fabrication of gas foil bearings used in cryogenic turboexpander.	TEQIP-III	2,00,000	Completed	PI
6	Development of an affordable liquid nitrogen generator for medical, veterinary and life science application	BPUT, CRIS, TEQIIP - III	3,00,000	Completed	Co-PI
7	Development of compact Indigenous cryocooler based single stage GM type pulse tube refrigerator	Board of Research in Nuclear Sciences (BRNS)	28,96,800	Completed	Co-PI
8	Development of Gas Foil Bearings for High Speed Turbo-expanders for Cryogenic Applications	Board of Research in Nuclear Sciences (BRNS)	30,54,250	Completed	PI
9	Design and Development of Dynamic Mechanical Analyser	Department of Science and Technology(DST),IMPRINT	3,60,90,000	Completed	Co-PI
10	Development of prototype turboexpander using self-acting gas bearings for cryogenic application	TEQIP-II	16,00,000	Completed	PI
	Development of kW Class Cryogenic Helium Turboexpander-Phase 1: Design and Modelling	Board of Research in Nuclear Sciences (BRNS)	9,41,250	Completed	Co-PI

Technical paper published

Published in Referred Journal:

1. **Priyadarshini, S., Behera, S. K.** Bio-inspired Herringbone Grooved Surface Topographies and Their Effect on Gas Foil Journal Bearing Performance. Surface Topography: Metrology and Properties, 2025. http://doi.org/10.1088/2051-672X/adb499

2. **Ohdar SK**, **Behera SK**. A comprehensive review on advancements in water-lubricated bearings: Surface texture, tribological performance, and thermal effects. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology. 2025;0(0). http://doi.org/10.1177/13506501241308021

3. **Priyadarshini S, Behera SK.** A comprehensive review on advancements in compliant structures of gas foil journal bearings. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology. 2024;0(0). http://doi.org/10.1177/13506501241249839

4. **Hara Prakash Mishra, Suraj Kumar Behera**, "Design of herringbone grooved thrust bearing for locomotive turbocharger rotor", Engineering Research Express,2024. http://doi.org/10.1088/2631-8695/ad5303

5. **Mishra, HP, Behera, SK.**, "A methodology for performance prediction: Hydrodynamic investigation of spiral grooved thrust bearing", Lubrication Science. 2023; 1- 21. http://doi.org/10.1002/ls.1649

6. **Debanshu S. Khamari,, Jitesh Kumar, Suraj K. Behera**, "A Review on Modeling and Stability Aspects of Gas Foil Bearing Supported Rotors", Tribology in Industry, January 2023, https://doi.org/10.24874/ti.1381.09.22.01

7. **Debanshu Shekhar Khamari, and Suraj Kumar Behera**. "Numerical and experimental studies on feasibility of a cryogenic turboexpander rotor supported on gas foil bearings". Sadhana. vol.48, no.4, 2023. , https://doi.org/10.1007/s12046-023-02298-7

8. **Debanshu Shekhar Khamari, and Suraj Kumar Behera**. "A novel multi-fidelity neural network for response prediction using rotor dynamics and model reduction". Journal of the Brazilian Society of Mechanical Sciences and Engineering. vol.45, pp.1-20,2023. , https://doi.org/10.1007/s40430-023-04521-2

9. **Panda, Debashis, Kumar, Manoj, Behera, Suraj K., Satapathy, Ashok K. and Sarangi, Sunil Kr**.. "Influence of drive chamber discharging process on non-linear displacer dynamics and thermodynamic processes of a fluidic-driven Gifford-McMahon cryocooler" Journal of Non-Equilibrium Thermodynamics, vol. 48, no. 1, 2023, pp. 1-23. https://doi.org/10.1515/jnet-2022-0073

10. **Panda, D., Behera, S. K., Satapathy, A. K., and Sarangi, S. K.** "Thermodynamic Characteristics of a Single Stage Pneumatically Driven Gifford–McMahon Refrigerator." ASME. J. Thermal Sci. Eng. Appl. September 2022; 14(9): 091018. https://doi.org/10.1115/1.4054284

11. **Debashis Panda, Suraj K. Behera, Ashok K. Satapathy, Sunil K. Sarangi**, "Investigations on Thermodynamic Processes of a Novel Pneumatic Drive Asymmetric Gifford-McMahon Cycle Cryorefrigerator", J. Energy Resour. Technol., 144(5): 052104 (13 pages)(2022), https://doi.org/10.1115/1.4053302

12. **Manoj Kumar, Rasmikanti Biswal, Suraj Kumar Behera, Ranjit Kumar Sahoo, Sandip Pal**, "Experimental and numerical approach for characterization and performance evaluation of cryogenic turboexpander under rotating condition", International Communications in Heat and

Mass Transfer, Volume 136, 2022, 106185, https://doi.org/10.1016/j.icheatmasstransfer.2022.106185

13. **DebashisPanda, Suraj K.Behera, Ashok K.Satapathy, R.K.Sahoo,S.K.Sarangi**," A comparative study on thermodynamic aspects of a mechanical drive and pneumatic drive GM cryocooler", Vacuum, Volume 199, 110938(2022), https://doi.org/10.1016/j.vacuum.2022.110938

14. **Kumar J., Khamari D.S., Behera S.K, Sahoo R.K.,** "Investigation of thermohydrodynamic behaviour of gas foil journal bearing accounting slip-flow phenomenon." J Braz. Soc. Mech. Sci. Eng. 44, 24 (2022). https://doi.org/10.1007/s40430-021-03330-9

15. **Kumar J, Khamari DS, Behera SK, Sahoo RK.** A review of thermohydrodynamic aspects of gas foil bearings. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology. December 2021. https://doi.org/10.1177/13506501211062536

16. **Jitesh Kumar , Debanshu S Khamari, Suraj K Behera and R K Sahoo**," A methodology for performance prediction: aerodynamic analysis of axially loaded gas foil bearing" Sådhanå, 46:193, (2021), https://doi.org/10.1007/s12046-021-01721-1

17. **Jitesh Kumar, Debanshu S Khamari, Suraj K Behera, Ranjit K Sahoo**. "Influence of slip-flow phenomenon on thermohydrodynamic behaviour of gas foil thrust bearings." Proceedings of the Institution of Mechanical Engineers Part J : Journal of Engineering Tribology. (vols 208-210). (2021). https://doi.org/10.1177/13506501211002962

18. **Debanshu S Khamari, Jitesh Kumar, Suraj K Behera**. "Numerical investigation of influence sensitivity of a gas foil bearing parameters on the dynamic coefficients." Journal of the Brazilian Society of Mechanical Sciences and Engineering, Volume 43, no. 167 (2021). https://doi.org/10.1007/s40430-021-02874-0

19. **Mohammad Autif Shahdhaar, Sandeep Sangamesh Yadawad, Debanshu Shekhar Khamari, and Suraj Kumar Behera**," Numerical investigation of slip flow phenomenon on performance characteristics of gas foil journal bearing", 2(1677),(2020), https://doi.org/10.1007/s42452-020-03494-4

20. **Manoj Kumar, Debashis Panda, Suraj K Behera, Ranjit Kumar Sahoo**, "Performance prediction, numerical and experimental investigation to characterize the flow field and thermal behavior of a cryogenic turboexpander", Heat and Mass Transfer,(2020). https://doi.org/10.1007/s00231-019-02777-w

21. **Manoj Kumar, Suraj Kumar Behera, Amitesh Kumar, and Ranjit Kumar Sahoo**," Numerical and experimental investigation to visualize the fluid flow and thermal characteristics of a cryogenic turboexpander" Energy,189, (2019), https://doi.org/10.1016/j.energy.2019.116267

22. **Manoj Kumar, Debashis Panda, Rasmikanti Biswal, Suraj Kumar Behera, and Ranjit Kumar Sahoo**, "Design and Numerical Investigation to Predict the Flow Pattern of Non-axisymmetric Convergent Nozzle: A Component of Turboexpander", Journal of Traffic and Transportation Engineering , (2019), https://doi.org/10.17265/2328-2142/2019.06.003

23. **Manoj Kumar, Debashis Panda, Suraj K. Behera, Ranjit Kumar Sahoo**, "Preliminary design,

flow field and thermal performance analysis of a helium turboexpander: a numerical approach", SN Applied Science, 1:1482 (2019), https://doi.org/10.1007/s42452-019-1503-3

24. **Manoj Kumar, Debashis Panda, Suraj K. Behera, Ranjit Kumar Sahoo**, "A methodology for the performance prediction: flow field and thermal analysis of a helium turboexpander", Brazilian Society of Mechanical Sciences and Engineering, 41.11 (2019):484, https://doi.org/10.1007/s40430-019-1989-z

25. **Manoj Kumar, Suraj K. Behera, Amitesh Kumar, Ranjit Kumar Sahoo**," Numerical and experimental investigation to visualize the fluid flow and thermal characteristics of a cryogenic turboexpander", Energy, (2019):116267. https://doi.org/10.1016/j.energy.2019.116267

26. **Manoj Kumar, Debashis Panda, Suraj K. Behera, Ranjit Kumar Sahoo**," Experimental Investigation and Performance Prediction of a Cryogenic Turboexpander using Artificial Intelligence Techniques", Applied Thermal Engineering, 162 (2019):114273. https://doi.org/10.1016/j.applthermaleng.2019.114273

27. **Manoj Kumar , R.K. Sahoo, S.K. Behera**, "Design and numerical investigation to visualize the fluid flow and thermal characteristics of non-axisymmetric convergent nozzle", Engineering Science and Technology an International Journal, Volume 22, pp 294-312, (2019). https://doi.org/10.1016/j.jestch.2018.10.006

28. **S D Sharma ,P.Kumar, Suraj K Behera, K K Kar** "Development of rubber pressure molding technique using butyl rubber to fabricate fiber reinforced plastic components based on glass fiber and epoxy resin", Journal of Applied Polymer Sciences, Vol. 101, 1095–1102 (2006), https://doi.org/10.1002/app.24005

29. **S D Sharma, P.Kumar, Suraj K Behera, K K Kar**, "Development of rubber pressure molding technique using polybutadiene rubber to fabricate fiber reinforced plastic components based on glass fiber and epoxy resin", Current Science, Vol. 90, No. 11, 10 June 2006, http://www.jstor.org/stable/24091823

30. **S D Sharma ,P.Kumar, Suraj K Behera, K K Kar** "Development of Rubber Pressure Molding Technique using Silicone Rubber to Fabricate Fiber-reinforced", Journal of Elastomers and Plastics Vol. 39–April 2007. https://doi.org/10.1177/0095244306067425

31. **Kar, K. K., S. D. Sharma, S. K. Behera, and P. Kumar**., "Development of a rubber pressure moulding technique for fiber reinforced plastics." Kautschuk Und Gummi Kunststoffe 59, no. 4 ,2006. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.477.1992&rep=rep1&type=pdf

Published in Referred Conference:

1. **Yadav, H., Behera, S.K.**, "Prediction of Unbalance in Rotor Using Artificial Intelligence." In: Panda, G., Basu, M., Siano, P., Affijulla, S. (eds) Proceedings of Third International Symposium on Sustainable Energy and Technological Advancements. ISSETA 2024. Lecture Notes in Electrical Engineering, vol 1254. Springer, Singapore, 2024. https://doi.org/10.1007/978-981-97-7018-2_32

2. **Hara Prakash Mishra, Debanshu Shekhar Khamari, Suraj Kumar Behera**. "Numerical Study and Optimization of Hydrodynamic Herringbone Grooved Journal Bearing", 18th International

Conference on Vibration Engineering & Technology of Machinery (VETOMAC) , IIT Roorkee, 18-20 December 2023.

3. **Debanshu S. Khamari, Jitesh Kumar, Suraj K. Behera**, "Rotordynamic analysis of a complex high-speed rotor", Materials Today: Proceedings, 2023, https://doi.org/10.1016/j.matpr.2023.07.322.

4. **Srusti Priyadarsani and Suraj Kumar Behera**, "Stiffness Prediction for Various Compliant Bump Structures Used in Gas Foil Bearings", India Trib-2022, December 12-14, 2022

5. **Suraj K Behera, Divyang G Bohra, Debanshu S Khamari, Jitesh Kumar, Gurmitsingh D. Bassan**," Feasibility Study of Foil Journal Bearing for LH2 Turbopump Used in Cryogenic Engine" 20th ISME, May-2022.

6. **Hara Prakash Mishra and Suraj Kumar Behera**, "Feasibility Study of Spiral Grooved Thrust Bearing for Turbocharger Rotor", International Conference on Advancements in Design and Tribology (ICADT), Dec-2021(Best Paper)

7. **Shantashree Jena, Partha Sarathi Kar, Debanshu Shekhar Khamari, and Suraj Kumar Behera**, "Rotordynamic Analysis of High-speed Complex Shape Rotor used in Cryogenic Turboexpander", 64th International Congress of ISTAM, Dec-2019

8. **Hitesh Kumar Sinha, Jitesh Kumar, Debanshu Shekhar Khamari, And Suraj Kumar Behera**, "Aerodynamic Analysis of Helium Lubricated Gas Foil Journal bearing", 64th International Congress of ISTAM, Dec-2019

9. **Debanshu S Khamari, Partha Sarathi Kar, Shantashree Jena, Jitesh Kumar, Suraj K Behera.** "Rotordynamic Analysis of High-speed Rotor used in cryogenic Turboexpander using Transfer Matrix Method" Sixth National Symposium on Rotor Dynamics NSRD-2019,CSIR-National Aerospace Laboratories, Bangalore, July 2-3, 2019.

10. **Jitesh Kumar, Ch. Rewant, Hitesh Kumar Sinha, Suraj Kumar Behera**. "Aerodynamic and Thermal analysis of Bump type gas foil thrust bearing for Cryogenic helium turboexpander", An International Conference on Tribology, TRIBOINDIA-2018, VJTI Matunga, Mumbai, India, December 2018.

11. **Ashutosh Kharche, Biren Kumar Pradhan,Debanshu S Khamari,Suraj Kumar Behera**, "Prediction of the Structural Stiffness of Bump Type Gas foil Bearings, An International Conference on Tribology,TRIBOINDIA-2018, VJTI, Mumbai,India,December 2018.

12. **Romi Dhakad, Biren Kumar Pradhan, Suraj K Behera**, "Prediction of Stiffness and Damping of Gas Foil Journal Bearing for High-Speed Rotor, An International Conference on Tribology, TRIBOINDIA-2018, VJTI, Mumbai,India,December 2018.

13. **Suraj K. Behera, Jitesh Kumar, Ranjit K. Sahoo**, "Design and Development of Passive Magnetic Bearings for High-Speed Turboexpander" International Conference on Magnetic Materials and Applications, ICMAGMA – 2018, Bhubaneswar, December 2018.

14. **Durjyodhan Sethi, Barnik Saha Roy, Vamsi Krishna K and Suraj Kumar Behera** "Optimized texture shape for enhanced performance of hydrodynamic thrust bearing based on variable texture height and aspect ratios",1st International Conference on Future Learning Aspects of Mechanical Engineering (FLAME - 2018),Noida, India, October, 2018

15. **Manoj Kumar, S. K. Behera, R. K. Sahoo**, "Design and numerical analysis of fluid flow characteristics in a non-axisymmetric convergent nozzle, Fifth International Conference on Computational Methods for Thermal Problems, ThermaComp2018, Indian Institute of Science, Bangalore, India, July, 2018.

16. **Dravida Krishnatreya, M. Kumar, S.K. Behera, R. K. Sahoo**, "Design and CFD Analysis to Visualize the Flow Pattern Inside Air Turbine: A Component of Turbo-expander", Fifth International Conference on Computational Methods for Thermal Problems ThermaComp2018, Indian Institute of Science, Bangalore, India, July, 2018.

17. **Suraj K Behera, Ranjit Kumar Sahoo**, "Development of gas foil thrust bearings for high-speed cryogenic turboexpander"., AsiaTrib-2018,Malaysia(Kuching),, September 2018.

18. **Ranjit Kumar Sahoo, Suraj K Behera**, "Design and development of bump-type gas foil journal bearings for cryogenic turboexpander", AsiaTrib-2018,Malaysia(Kuching),, September 2018.

19. **Birendra Kumar Pradhan**, **Suraj K Behera,** "Feasibility Studies on Gas Foil Journal Bearings in Helium Turboexpander", ICIT-2017,Kolkatta, December-2017

20. **Manas Ranjan Pattnaik, Suraj K Behera, Shih-Chieh Lin**, "Design of Dimensionless Parameters of a Parallel Combination of Capillary restrictor and Membrane type restrictor in single-pad hydrostatic bearing set-up to achieve high static stiffness", ICIT-2017,Kolkatta,India, December-2017

21. **Manoj Kumar, S. K. Behera, A. Kumar** "A Numerical Analysis of Predicting Flow Pattern Inside A Turboexpander", Proceedings of the 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power, MNNITA, Allahabad, U.P., India, December, 2016

22. **Suraj K Behera, Sunil K Sarangi, Ranjit k Sahoo and Trilok Singh,** "A methodology for fabrication gas foil bearing for turboexpander used in nitrogen liquefier", ICEC 26 - ICMC 2016, March 2016

23. **Suraj K Behera, Sunil K Sarangi and Trilok Singh**, "Feasibility Studies on Gas Foil Journal Bearings in Small and High Speed Oil-Free Cryogenic Turboexpander", AsiaTrib-2014, February 2014.

24. **Suraj K Behera, Sunil K Sarangi, Ranjit k Sahoo and Trilok Singh**, "Design and Fabrication of Gas Foil Journal Bearing for High Speed Small Turboexpander Used in Cryogenic Application", National symposium on cryogenic-25, Hyderabad, December 2014.

25. **Sarthak Rout, Suraj K Behera**, "Design and Development of Active Magnetic Bearings", NSRD 2016, Rourkela, January 2016.

26. **Sarthak Rout, Suraj K Behera**, "Hydrodynamic analysis of spiral grooved thrust bearings", NSRD 2016, Rourkela, January 2016.

27. **D.Sethi, Suraj K Behera,** "Hydrodynamic Analysis of Different Textured Profile Thrust Pad Bearing", AsiaTrib-2014, February 2014.

28. **Prabhajyoti Patra ,Suraj K Behera, "**Aerodynamic analysis of tilting pad pivot-less journal bearing", National Tribology Conference, December 2014.

29. **Himalaya Dawani, Suraj K Behera**," Hydrodynamic analysis of textured journal bearing", National Tribology conference, December 2014

30. **S D Sharma, P.Kumar, Suraj K Behera, K K Kar** "Development of Rubber Pressure Molding Technique to Fabricate Reinforced Plastic Components" XII National Seminar on Aerospace Structures, September 2003, Bangalore.

Book Chapters

1. **Mishra, H.P., Behera, S.K.** (2024). A Study on Hydrodynamic Analysis of Spiral Grooved Thrust Bearing for Locomotive Turbocharger. In: Sinha, S.K., Kumar, D., Gosvami, N.N., Nalam, P. (eds) Tribology for Energy, Environment and Society. ICOIT 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-99-9264-5_9

2. **Javed, M.A., Mishra, H.P., Behera, S.K**. (2024). Numerical Analysis of Oil Lubricated Journal Bearing with Herringbone Grooves. In: Sinha, S.K., Kumar, D., Gosvami, N.N., Nalam, P. (eds) Tribology for Energy, Environment and Society. ICOIT 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-99-9264-5_10

3. **Priyadarshini, S., Behera, S.K.** (2024). Stiffness Prediction for Various Compliant Bump Structures Used in Gas Foil Bearings. In: Sinha, S.K., Kumar, D., Gosvami, N.N., Nalam, P. (eds) Tribology for Energy, Environment and Society. ICOIT 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-99-9264-5_18

4. **Sahoo, R.K., Mohapatra, D., Behera, S.K.** (2022)**.** Forming Simulation of Bump Foils Used in Complaint Gas Foil Bearings. In: Dave, H.K., Dixit, U.S., Nedelcu, D. (eds) Recent Advances in Manufacturing Processes and Systems. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-7787-8_41

5. **Khamari, D.S., Kar, P.S., Jena, S., Kumar, J., Behera, S.K.** (2021). Rotordynamic Analysis of High-Speed Rotor Used in Cryogenic Turboexpander Using Transfer Matrix Method. In: Rao, J.S., Arun Kumar, V., Jana, S. (eds) Proceedings of the 6th National Symposium on Rotor Dynamics. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-5701-9_11

6. **Kumar, M., Sahoo, R.K., Panda, D., Behera, S.K**. (2021). CFD Analysis to Envisage the Fluid Flow Inside a Turboexpander Operating at Cryogenic Temperature. In: Ramgopal, M., Rout, S.K., Sarangi, S.K. (eds) Advances in Air Conditioning and Refrigeration. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-6360-7_8

7. **Rout S.K., Choudhury B.K., Behera S.K., Sarangi S.K.** (2021) Development of Indigenous Technology for Large Cooling Capacity GM Cryorefrigerator for Application to High Tc Superconducting Magnets—Prospects and Problems. In: Ramgopal M., Rout S.K., Sarangi S.K. (eds) Advances in Air Conditioning and Refrigeration. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-6360-7_17

Details of Academic Experience

#	Name of Organization	Address of Organization	Designation	Organization Type	From-To
1	NIT Rourkela	Rourkela, Odisha, India	Associate Professor	Engineering Institute	01 July 2024- Till Date
2	NIT Rourkela	Rourkela, Odisha, India	Assistance Professor	Engineering Institute	03 Jan 2012- 30 June 2024
3	C.V.Raman College of Engineering	Bhubaneswar, Odisha, India	Assistance Professor	Engineering Institute	01 Sep 2009- 13 Jul 2011

Details of Industrial Experience

#	Name of Organization	Address of Organization	Designation	Organization Type	From-To
1	Amdocs	Magarpatta City, Hadaspur, Pune India	Development Group Leader	Telecom Consultancy	27 Sep 2007- 25 Mar 2009
2	Covansys	Madras Export Processing Zone, Chennai, India	Team Leader	Software Consultancy	05 Jun 2006- 21 Sep 2007
3	Tata Consultancy Services	Chennai, Tamilnadu, India	Assistance System Engineer	Software Consultancy	16 Apr 2003- 02 Jun 2006
4	Tata Steel	Dhanbad, Jharkhand, India	Senior Officer	Steel company	01 Jul 1999- 16 Jul 2001

Other Engagement Overview

- PhD Thesis Guided: 03 completed + 04 continuing
- PG Thesis Guided: 35
- UG Thesis Guided: 38
- Seminars/Conferences/Short-Term Courses/Workshop Organized: 10
- Membership of Professional Bodies:
    - Tribology Society of India (Affiliated to International Tribology Council, UK) (TSI),
    - Indian Cryogenic Council(ICC),
    - Indian Society of Heating Refrigerating and Air Conditioning Engineers
- Present Administrative/Institute Support Work:
    - Professor In-charge, Cryogenic Laboratory.
    - Faculty Advisor, Faculty Advisor for Society Automotive Engineers team (SAC)
    - Coordinating Warden (Maintenance), Chief Warden Office, NIT Rourkela.
    - Faculty Advisor for Mechanical 2022-26 Batch.
    - Co-PI for AICTE, Margdarsan Scheme.
    - Co-PI, CBDE, NIT Rourkela

- Past Administrative/Institute Support Work:
    - Warden, SSB Hall of Residence, NIT Rourkela.
    - Committee members for Hostel Management, Transport and On Campus Business.
    - Professor In-charge, Industrial Refrigeration and Cryogenics
    - Faculty Advisor, M Tech, Machine Design and Analysis
    - Faculty Advisor for Dual Degree Mechanical.
    - PIC of Carpentry and Welding Shop.