



**Name Dr Rajini V Honnungar**

**Designation Professor and HoD**

**Experience (Teaching )**

RNSIT (2004- till date)

VKIT(1998-2004)

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**Qualifications**

B.E. from Dr Ambedkar Institute of Technology

M.Tech. from B M S College of Engineering

PhD from Indian Institute of Science

**Specialization (Academics)**

Antennas Microwaves

Optical Communication

Analog electronics

Satellite Communication

**Specialization (Research): Integrated Optics and Microwave Photonics**

**Funded Projects /FDPs**

- 1)Fiber Bragg grating Sensor and AI/ML based Optical Health Decision support system for Diagnosis of Vital health care parameters for Hospitalized patients as Co-PI,VTU (RGS) 2022, 10 Lakh Rupees(ongoing).
- 2) Fiber Bragg grating Sensor based device for the measurement of Angular Grip strength as Co-PI VTU(CRG) 2019, 2 Lakh Rupees(completed).
- 3) MANIM – An Animation Library, PI, 300 US dollars funding from IEEE EPICS(completed)
- 3) ATAL FDP on Recent Trends in the world of Photonics, PI, 2021, Rupees 93,000/- (completed)

**Talks delivered**

- 1) Talk on Optical Fiber Sensors, at the ATAL FDP, held at The Oxford college of Engineering, Bangalore, 2024.
- 2) Talk on the Introduction to Microwave Photonics, at the 2-day training programme at LRDE-DRDO,2024
- 3) Talk on Analog design at the FDP on simulation of electronic circuits using Multisim, Pspice and LabVIEW, organized by VTU, 2022.
- 4) Talk on The Art of Technical Paper Writing, at RNSIT, 2022
- 5) Talk on Photonic Integrated Circuits and Applications, at VKIT, Bangalore, 2022

**Publications**

1. Ibrar Jahan M A, Rajini V Honnungar, “Design and Modeling of Ultra-compact and Highly-sensitive Silicon Bragg Grating Sensor for Biochemical Sensing Applications”, Silicon Journal, Vol. 24, pp. 1-9, March, 2022, doi.org/10.1007/s12633-022-01740-5
2. Ibrar Jahan M A, Rajini V Honnungar, “Experiments and Modeling of Hand Grip Strength Measurement for Musculoskeletal Parameters Monitoring”, INDIACom - 2022; International Conference on Computing for Sustainable Global Development, technically

- sponsored by IEEE Delhi Section, scheduled to be held during 23rd - 25th March, 2022 at Bharati Vidyapeeth, New Delhi (INDIA). doi: [10.23919/INDIACom54597.2022.9763274](https://doi.org/10.23919/INDIACom54597.2022.9763274)
3. Padmaja Jain, Rajini V Honnunar, "Comparative analysis of EO effects in InP/InGaAsP and LiNbO<sub>3</sub> based waveguides for switching device applications," *Neuroquantology Journal*, Vol. 20, Issue 15, pp. 7485-7489, 2022.
  4. Ibrar Jahan M A, Ciro Rodriguez Rodriguez, Rajini V Honnunar, "Modeling and Simulation of FBG Based Pressure Sensor for Micro Level Strain Measurement," *IEEE International Conference on Electronics, Computing and Communication Technologies*, 8<sup>th</sup> to 10<sup>th</sup> July, Bangalore, CONECCT 2022, doi: [10.1109/CONECCT55679.2022.9865822](https://doi.org/10.1109/CONECCT55679.2022.9865822)
  5. Ibrar Jahan M A, Venkatesha M, Ciro Rodriguez, Rajini V Honnunar, "Bragg Grating based Nanophotonic Biochemical Sensor with Enhanced Light Matter Interaction," *Optoelectronics and Advanced Materials- Rapid Communications Journal*, Vol. 7, pp. 99-105, 2023. Scopus Indexed-Q3
  6. Rajini V Honnunar, Nalini S, "Design and Modeling of Fiber Optic Sensor for Temperature Sensing in Electrical Substations," *Workshop in Recent Advances in Photonics*, 7<sup>th</sup> to 9<sup>th</sup> December, 2023, IIT Alahabad (In Press)
  7. K. Chethana, R. V. Honnunar, M. A. Ibrar Jahan, S. Asokan and R. Bhargav Narayan, "Experiments and Modeling of Hand Grip Strength Measurement for Musculoskeletal Parameters Monitoring," *2022 9th International Conference on Computing for Sustainable Global Development (INDIACom)*, New Delhi, 23<sup>rd</sup> to 25<sup>th</sup> March, pp. 556-559, 2022, doi: [10.23919/INDIACom54597.2022.9763274](https://doi.org/10.23919/INDIACom54597.2022.9763274)
  8. EMI -The Need For Sheilding, Dr Rajini V Honnunar , Dr Prabhavathi C N, *Futuristic Trends in Electronics & Instrumentation Engineering with e-ISBN: 978-93-6252-491-1, IIP Series, Volume 3, Book1, Part 6, Chapter 2, Page 254-266. , May 2024 .-Book Chapter*
  9. Madhuri Kulkarni, Rajini V Honnunar, *Lecture notes in Electrical Engineering by Springer (ICPSPCT-18) emerging trends in photonics, SP and Communication Engg. "Planar waveguide Bragg Grating pressure sensor-design and applications", Kulkarin, et.al 2019.*
  10. Ibrar Jahan, Rajini V Honnunar, "Sensitivity Improvement and Opto mechanical Analysis of Composite Material Using Fiber Bragg Grating", *International Journal of Engineering and Technology*, 7(4.36)(2018)204-211.
  11. Chaitra T S Rajini V Honnunar, "Design of Power splitter, combiner and Interferometer using Ga-As semiconductor", *WRAP 2019, IIT Guwahati, Dec13-14, 2019.*
  12. Chethana, K, Rajini V Honnunar, IbrarJahan, *Comparison Studies on HandGrip Measurement Techniques using FBG Sensor and sEMG", 2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT) Bangalore,India,2020,pp.1-6, ,doi:10.1109/CONECCT50063.2020.9198583.*

### Awards Received

Best Teacher Award RNSIT -2006  
 Best Paper Award ICOL -2014, DehraDun