CURRICULUM VITAE

Personal Details:

Candidate Name: Venkateswara Rao Kolli Gender: Male Date of Birth: 14-03-1974



Present Address:

Assistant Professor, Electronics and Communication Engineering, Malnad College of Engineering, Hassan-573 202, Karnataka Telephone (Mobile) : +91 8277566555, +919494344004 Telephone (Office) : +91 8172245361 Email: <u>venkukolli@gmail.com</u>, <u>vrk@mcehassan.ac.in</u>

Education, commencing with SSC qualification:

Degree	Specialization	College	University	Year	Percentage /CGPA	Class/ Division
X	SSC	Z.P.P.High school, Pot havaram, Andhra Pradesh	Board of Secondary Education, Andhra Pradesh	1991	68.17	First
Diplom a	Computer Engineering	Dr.B.R.A. G.M.R. Polytechn ic college, Rajahmundr y, Andhra Pradesh	State Board of Technical Ed ucation, Andhra Pradesh	1995	67.90	First
B.Tech	Electronics and Commu nication Engi neering	S.V.H. College of Engine ering, Machilipatna m,	Acharya Nagarjuna University, Andhra Pradesh	2003	60.24	First

		Andhra Pradesh				
M.Tech	Digital electronics and Commu nication Syst ems	Malnad College of Enginee ring, Hassan, Karnataka	Visvesvaray a Technologic al University, Karnataka	2009	68.00	First

Ph.D	Integrated Optics	Indian of Science, I	Institute Bangalore	Indian Institute of Science, Bangalore	2018	5.80	First
				Bangalore			

PhD Advisor:

Prof. T. Srinivas, Professor, ECE Department, Indian Institute of Science, Bangalore

Title of Thesis:

Integrated Optic Microring Resonator based Sub-µN Force and Acceleration Sensors

Areas of specialization:

Photonics: - Integrated Optical MEMS, Optical MEMS and photonic crystal based devices for the sensing and communication applications

CURRENT POSITION

Assistant Professor October 2006 - current Electronic and Communication Engineering, Malnad College of Engineering, Hassan-573202, Karnataka.

RESEARCH INTERESTS

- Integrated Optical MEMS based force, pressure, acceleration, and Bio sensors and other applications
 - Photonic crystal MEMS based force, pressure and Bio sensors

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PhD SUPERVISING AT MCE, HASSAN

1. Basava Prasad registered in the year of 2020

2. Megha Shree registered in the year of 2023

M.TECH THESES SUPERVISED AT MCE, HASSAN

 Basavaprasada, High Q factor 2D PC based ring resonator for detection of glucose concentration in urine, 2019
Balaramgowda, integrated optical ring resonator-based bio sensor, 2018 3. Girish P R, Photonics crystal-based pressure sensor using diaphragm, 2018. 4. Preetham J K, Photonic crystal ring resonator-based biosensor, 2018

5. Athira K, Strain measurement in the optical fiber, 2017.

6. Divyashree K N, Analysis of dispersion in optical fiber using chirping method, 2017.

MEMBERSHIP IN TECHNICAL SOCIETIES.

ISTE life member IEEE member IEEE Photonics member Karnataka photonics Execom committee member

PUBLICATIONS

Link to Google Scholar page

https://scholar.google.com/citations?user=8LiKAlkAAAAJ&hl=en

As on 28 July, 2023, Citation Count: 97, h-index: 6, i10 index: 2.

JOURNAL PAPERS

1. **Venkateswara Rao Kolli**, Srinivas Talabattula, An Optimized Integrated Optical Coupled Micro Ringresonator for Low-Pressure Sensing, IEE Sensors, Volume/Issue: Volume 22 , Issue 16, Jul 12 2022, DOI: 10.1109/JSEN.2022.3188873 , Impact factor- 4.60, SCI.

2. **Venkateswara Rao Ko**lli, Indira Bahaddur, Srinivas Talabattula , *A high sensitive photonic crystal Mach-Zehnder-Interferometer based pressure-sensor*, Elesvier - Results in Optics, 202, Scopus.

3. Venkateswara Rao Kolli, Prabhakar Dudla, Srinivas Talabattula, *Integrated optical MEMS serially coupled double racetrack resonator based accelerometer*, Elesvier, Optik (2021) Volume 236, June 2021, 166583, Impact factor-2.840, SCI.

4. Venkateswara Rao Kolli, Indira Bahaddur, Basavaprasad, Dudla Prabhakar, Srinivas Talabattula, *High Q-factor Photonic Crystal Microring-resonator based Pressure Sensor*, Elsevier-Photonics and Nanostructures - Fundamentals and Applications 2020, Volume 43, February 2021, 100870., Impact factor- 3.064, SCI. 5.T Sreenivasulu, Venkateswara Rao Kolli, Badrinarayana T, Gopalkrishna Hegde, T Srinivas, *Photonic crystal ring resonator based force sensor: Design and analysis*, Elesvier, Optik 155 June-2018, 111-120 Impact factor-2.840, SCI

6.Venkateswara Rao Kolli, Tupakula Sreenivasulu, T Badrinarayana, Gopalkrishna Hegde, T Srinivas, *Design and Analysis of Serially Coupled Double Microring Resonator Based Force Sensor for 1 μN Range Measurement,* Elsevier, Optik 131 Feb-2017 1063-1070. Impact factor 2.840, SCI

7. T Sreenivasulu, Venkateswara Rao Kolli, T R Yadunath, T Badrinarayana, Amaresh Sahu, Gopalkrishna Hegde, S Mohan and T Srinivas, *Photonic Crystal based Sensor to Measure Sub micro Newton Forces over a Wide Range*, Current Science, Vol. 110, No. 10, May 2016. Impact factor 1.102, SCIE.

8. Tupakula Sreenivasulu, Venkateswara R. Kolli, Badrinarayana Tarimala, Gopalkrishna Hegde, Mohan Sangineni, and Srinivas Talabattula, *Super Defect Inside Photonic Crystal Ring Resonator to Enhance Q Factor*, SPIE Journal of Optical Engineering, Vol. 55, No. 3, 035103, March 2016. Impact factor 1.09, SCI.

INTERNATIONAL CONFERENCES

1. Varsha, Indira Bahaddur, **Venkateswara Rao Kolli**, Photonic Crystal Based Bio-Sensor using Rhombic Ring Resonator for Cancer Cell Detection, 2021 IEEE International Conference on Electronics, Computing and Communication Technologies (IEEE-CONECCT).

2. Venkateswara Rao Kolli, Basavaprasad, Srinivas Talabattula, *High Q Photonic Crystal Based Microring Resonator Biosensor for the Detection of Glucose-Concentration in Urine and Blood*, IEEE-CONNECT, July-2020.

3. Venkateswara Rao Kolli, Srinivas Talabattula, Design and Analysis of MEMS Racetrack Resonators for Force Sensing Applications, IEEE-CONNECT July-2020

4. Lakshmi, Venkateswara Rao Kolli, P. C. Srikanth, D. L. Girijamba, Indira *BahaddurPressure* Sensor Based On 2-Dimensional Photonic Crystal Resonator", VLSI, Signal Processing, Power Electronics. IoT. Ring Communication and Embedded Systems" (VSPICE-2020- ICETE-2020) being held on 22nd and 23rd December 2020.

5. Basavaprasad, Indira Bahaddur, Venkateswara Rao Kolli, *High Q-factor 2D PC Microcavity Ring Resonator Based Biosensor for Biomedical Applications*,2019 1st International Conference on Advances in Information Technology (ICAIT), 2019.

6. Ravali Pampala, V.R. Kolli, T. Srinivas, *Differential Pressure Sensor Using Integrated Optical MEMS and Double Ring Resonator*, IEEE Workshop on Recent Advances in Photonics (WRAP), 2017, WRAP 2017-Hyderabad, India

7. Venkateswara Rao Kolli, T R Yadunath, Resmi R K, T Badrinarayana, Gopalkrishna Hegde, T Srinivas, Design, *Fabrication and Characterization of 5 \mu m Ring Resonator*, OSA, International Conference on Fibre Optics and Photonics-2016 Kanpur India, ISBN: 978-1-943580-22-4, 4-8 December 2016.

8.T Sreenivasulu, **V R Kolli**, Amresh Kumar Sahu, and T. Srinivas, *Photonic Crystal based Sensor for Small Forces, International Conference on Microwave and Photonics*, Dhanbad, pp. 1-3, December 2015.

9. T Sreenivasulu, **V R Kolli**, Anusree K, Yadunath T R, Badrinarayana T, T Srinivas, Gopalkrishna Hegde, and S Mohan, *Photonic Crystal based Force Sensor on Silicon Microcantilever*, IEEE International Conference on Sensors – IEEE Sensors - 2015, Busan, pp. 247-250, 1-4, November 2015..

10. Apoorva S P, Ashritha H A, Chalana S, Anil Kumar T M and **Venkateswara Rao Kolli**, Photonic Crystal Hexagonal Resonator Bio-sensor for the Detection of Glucose in Blood, Albumin and Urea in Urine(Under Preparation)

PATENTS PUBLISHED

- 1. Venkateswara Rao Kolli, Dudla Prabhakar, Anusha, Srinivas Talabattula, "Integrated optical serially coupled microring resonator-based accelerometer and high Q-factor photonic crystal microring resonator-based pressure sensor", Application Number, 202141040452, 09.06.2023 Granted.
- 2. Venkateswara Rao Kolli, Dudla Prabhakar, Srinivas Talabattula, "ADVANCE, AND HIGH SENSITIVE PHOTONIC CRYSTAL MACH-ZEHNDER-INTERFEROMETER BASED PRESSURE-SENSOR", Application Number, 202141048718, November 2021. Published.
- **3.** Rshitej Chaparala, Imamvali Shaik Yuvarahy Chinnam, **Venkateswara Rao Kolli** Sreenivasulu Tupakula, "Spoof Surface Plasmon Polaritons Waveguide for Sensors based Applications". 202341033912, 15 May 2023 Published.

CONFERENCE NOT PRESENTED/POSTERS

1. **V Rao Kolli**, Ravali Pampala, Yadunath T R and Srinivas Talabattula Integrated Optic Microring Resonator based Sub-µN Force and Acceleration Sensors, EECS Symposium-2018, Indian Institute of Science, Bangalore

2. **Venkateswara Rao Kolli**, K.G.Narayanan, T.Srinivas, An Integrated Optic Force Sensor Based on Serially Coupled Double Microring Resonator, BRICS PHOTONICS May-2016, Masckow, Russia.

3. **Venkateswara Rao Kolli**, Sreenivasulu.T, Yadunath.T.R, Anusree Kandoth, T.Srinivas, Mechanically Tunable IO Microring Resonator Based Force Sensor, Dec, ICANN-2015, IIT Guwahati,2015.

4. Yadunath.T.R, Anusree Kandoth, Srinivasulu T, **Venketeswara Rao Kolli**, Lavendra Yadav, GopalHegde, Badrinarayana, T.Srinivas, S.Mohan, Photonic Crystal Fabrication For Integrated Optics Applications , ICEE-December-2014,IISc, Bangalore.

INTERNATIONAL CONFERENCES ATTENDED

 International conference on smart systems and smart material structures and systems, July 08-11 2014 at the Indian Institute of Science, Bangalore.
IEEE workshop on Recent Advances in Photonics (WRAP) 2015 organized by IEEE Photonics society on 16th and 17th December at IISc, Bangalore.

3. IEEE CRALT 2016, Conference on Recent Advances in Light wave Technology 21-23 September 2016 Bangalore International Exhibition Center.

Declaration:

I hereby declare that all entries in this form as well as the information provided in the attached documents are true to the best of my knowledge and belief.

Venkateswara Rao Kolli