

Department of Physics

Name of the Faculty: Dr. Vijay K. Kulkarni

PhD Completion Year: 2009

ORCID Id: ---

Microsoft Researcher Id: ----

Scopus Id: ----

<https://scholar.google.com/citations?user=wkkAJdMAAAAJ&hl=en>

Number of PhD candidates guided/Guiding: 05

List of Collaborations (Mention Institute/department/organisation name, Country)

- a.
- b.
- c.

(I) Details of Original Research Article Contributions

Serial No	Journal Name/Publisher	Paper Title/Authors	Indexing *	Impact Factor/Q rating	DOI* (paste only DOI link)	Accepted/Published Year, Volume, issue, page number
1	Journal of Optoelectronics and Advanced Materials	Fiber Optic Micro-displacement sensor using coupler	SJR 0.22 H Index 43	0.63	https://joam.inoe.ro/arhiva/pdf8_4/4Kulkarni.pdf	2006 Vol. 8 No. 4, 1610-1612
2	Journal of Optoelectronics and Advanced Materials	Bend induced loss in single mode fiber for designing simple interferometric temperature sensor	SJR 0.22 H Index 43	0.63	https://old.joam.inoe.ro/arhiva/pdf8_5/5Lalasangi.pdf	2006, Vol 8, No.5, October 1901 – 1904
3	journal of optics communication	Temperature dependence of bend loss in single mode communication fiber: effect of fiber buffer coating fiber”,	SJR 0.698 H Index 17	2.125	https://doi.org/10.1016/j.optcom.2007.01.030	(2007). 273, 402-406

4	Optoelectronics and Advanced Materials – Rapid Communications	Etched fiber Bragg grating as ethanol solution concentration sensor”	SJR 0.2 H Index 28	0.445		2007, Vol.1, No 4, 149-151
5	Optoelectronics Letters	Evanescent field absorption sensor for detection of copper (II) in water using multimode optical fiber”.	SJR 0.18 H Index 18	0.56	https://doi.org/10.1007/s11801-009-9041-7	2009, Vol.5 No.3, 1 0224-0226
6	Optik.	Concentration and refractive index sensor for methanol using short period grating sensor	SJR 0.47 H Index 66	2.187	https://doi.org/10.1016/j.ijleo.2009.11.012	2011, Vol 122, 89-91
7	Asian Journal of Chemistry	Light Emitting Diode Based Evanescent Wave Fiber Optic Chemical Sensor for Detection of Thiocynate”,	SJR 0.15 H Index 34	0.336	https://doi.org/10.1016/j.ajchem.2018.20958	2018, Vol 30, No 2, 351-354
8	American Institute of Physics (AIP) at Conference proceedings,	LED based evanescent wave fiber optic sensor technique to detect Fe +2 concentraton”	SJR 0.18 H Index 75	0.415	https://doi.org/10.1063/1.4947830	2016,1731,060024)
9	American Institute of Physics(AIP) Conference Proceedings	Detection of thiocynate in water by fiber Bragg grating”	SJR 0.18 H Index 75	0.415	https://doi.org/10.1063/5.0016939	2020,2265,030188

(II) Details of Book Publications

Serial No	Book Title/Publisher	ISBN Number *	Authors	E source page*
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1	Propagation Effects in optical fibers and fiber optic sensor system”, LAP LAMBERT Academic Publishing	ISBN (978-620-2-91935-7).	Dr.Vijay K.Kulkarni	https://www.lap-publishing.com/catalog/details//store/gb/book/978-620-2-91935-7/propagation-effects-in-optical-fibers-and-fiber-optic-sensor-system
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(III) Details of Book Chapter Publications

Serial No	Book Chapter Title/Publisher	ISBN Number	Authors	E source page	DOI*/Vol number/Page Number
1	Evanescence wave fiber optic sensor for detection of Fe⁺² using LED source B P International	In Press	Dr.Vijay K.Kulkarni		

(IV) Details of Patent publications/Grants (Indian/Foreign)

Serial No	Title of the Innovation	Application Number*/Grant	Authors	Filled/Published Web link*	Date of publication/Grant
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		Number*/Patent Reference Number		(Indian/Foreign)	
1					

(V) Details of Membership to Professional Bodies

Serial No	Name of the Society/Organization	Membership Number*/Type	Role	Date of joining
1	The Indian Society for Technical Education, New Delhi.	Life member (LM 73316)		2010
2	The Indian Science Congress Association Kolkatta	Life member (L20771).		09-10-2012

(VI) Details of Conference Chair*/Proceedings

Serial No	Name of the Conference/National/International	Title of the Paper Presented*	Date/Venue/oral/poster	Presenting Author Name
1	National conference on Microwaves and Optoelectronics (NCMO-2004),.	Study of pulse dispersion in optical fibers with clad graded index profiles”.	June 29-30, 2004 Dr. Babasaheb Ambedkar Marathwad University, Aurangabad	Dr.V.K.Kulkarni
2	NSPTS – 11,.	Fiber optic displacement sensor using coupler”	27 Feb 2006 – 1 March 2006 held at Pune University, PUNE	
3	8 th International conference Optoelectronics, Fiber Optics and Photonics, Photonics	Determination of LP ₀₁ modal fields and spot sizes in single mode graded index optical fiber	2006 held at Hyderabad, India December 13-16, 2006.	
4	8 th International conference Optoelectronics, Fiber Optics and Photonics, Photonics	Fiber Bragg Grating as highly sensitive solution concentration sensor	2006 held at Hyderabad, India December 13-16, 2006.	
5	International Conference on Advanced Materials and Applications,.	Evanescent field absorption sensor for detection of	November 15-17, 2007, at Shivaji University, Kolhapur	

		Copper (II) in water using multimode optical fiber		
6	International Conference on Optics and Photonics (ICOP)	Temperature dependent bend loss in single mode fiber due to whispering gallery mode using He-Ne source	30 Oct-01 Nov 2009, at CSIO, Chandigarh	
7	International Conference on MEMS and Optoelectronics (ICMOT-2010)..	Determination of Refractive Index of Ethanol and Hydrogen Peroxide using Etched Fiber Bragg Grating'	Jan 22- 23, 2010. at Swarnandha College of Engineering and Technology, Narsapur, West Godavari district A.P	
8	102, Indian Science congress.	Detection of Weak Acid Dissociable of Cyanide ie Thicyanate by Evanescent Wave Absorption Technique	from 3-7 Jan 2015 at Mumbai University, Mumbai	
9	DAE- BRNS National Laser Symposium (NLS 28),	Development of FBG sensor for detection of thiocyanate in water.	8-11 Jan 2020 at VIT Chennai Campus.	

(VII) Any other details* (Kindly attach relevant certificates)

Completed two research projects

- Completed research project entiteled “*Evanescent wave fiber optic chemical sensing*”sanctioned by **Visvesvaraya Technological University(VTU)**, Belgaum, Karnataka state. Research grant is **Rs.5.00 lakhs.** for period of three years
- Completed research project entiteled “*Analysis of Microscopic Chemical Species in Liquids Using Fiber Bragg Grating Sensor*” by **Vision Group on Science & Technology(VGST)** under Seed Money to Young Scientist for Research (SMYSR) by Karnataka State, 13-14. Research grant is **Rs.6.00 lakhs** for period of one year.

Note: * marked fields are compulsory to fill