

PROFILE

Dr. Vivekanand Mishra, Senior Member IEEE



Present Address:

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Educational Qualification:

Degree	Support Area	Year	Institute/ University
Ph. D.	Optical Communication and Optical Waveguide	2001	Institute of Technology, B.H.U. India
M. Sc.	Physics specialization in Electronics	1995	Purvanchal University U.P

Teaching Experience:

Organization	Post held	Duration	Responsibilities
SV NIT, Surat	Associate Professor (Present Post)	06-10-2009 Onwards	Teaching of UG & PG Students and Administrative work
UTAR, Malaysia	Assistant Professor	03-12-2007 to 04-10- 2009	Teaching of UG & PG Students and Administrative work
Multimedia University, Malaysia	Lecturer	October 2001 to October 2007	Teaching of UG & PG Students and Administrative work
Telecom Malaysia Research and Development	Research Fellow	03-2007 to 09-2007	R&D Work

Administrative Assignments at SVNIT:

- Department Examination coordinator
- Ph. D interview committee member
- Curriculum Committee member
- Hostel Warden

Research Publications:

- International Journals: 33
 - International Conference: 15
 - National Conference: 04
- (Kindly refer the List of Research Publications attached vide Annexure-1)

Professional Membership:

- Senior Member IEEE

Area of Research Interest:

- Optical Communications
- Optical Sensor
- Nonlinear Optics

Expert Lectures delivered: 02

M. Tech. Dissertation Guided: 05+ 05 (ongoing)

Ph. D Guided: 06 (ongoing)

Professional Experience:

- Reviewer of Second International Conference on Electrical & Computer Engineering ICECE-2005, Bahir Dar , Adis Ababa.
- Reviewer of Telecommunications paper for M2USIC 2007 Malaysia.
- Active member and secretary of Institute of Photonics Research and Application (IPRA) and Optical communication group (OCG), MMU Malaysia (from 2002-2007)
- Progress in Electromagnetic and Research symposium (PIER), Marrakesh,2011.
- Reviewer Second International conference on Advances in computing Communication and Control organized by Fr. Agnel's, Fr. Conceicao Rodriguez College of Engineering, Mumbai, ICAC3, 2011
- Reviewer ,International Conference on Communications and Signal Processing National Institute of Technology Calicut 10-12, February 2011, ICCSP 2011
- Coordinator in workshop” Nanotechnology and Materials, SVNIT,2010 Surat

Professional Service:

- Research Fellow, Telecom Malaysia Research and development (TM R&D)
- Reviewer, IEEE journal of Quantum Electronics
- Reviewer, IEEE Journal of Light wave Technology
- Member technical committee for ICEM/AECM 2010, Kuala Lumpur

Research Projects:

<i>Sr. No</i>	<i>Project title</i>	<i>Funded by</i>	<i>Amount</i>	<i>Status</i>
1.	Analysis design and construction of acoustic tunable filter based on tapered fiber	E-Science, Malaysian Government	30,000USD	Completed (2002-2005)
2.	S-band optical amplifier, Project number -02-01-SF0007	E-Science, Malaysian Government	90,000USD	Completed (2003-2007)
3.	Design of Erbium-Doped Dispersion Compensating Fibers, and their Implementation as an Integrated Dispersion and Loss Compensation Device, Project no.01-02-01-SF0005	E-Science, Malaysian Government	100,000 USD	In Progress (Started 2006)
4.	Study and application of Nonlinear Effects In Photonic Crystal Fibers, Project Number: MMU0000043	E-Science, Malaysian Government	80,000USD	In Progress (Started 2007)
5.	Simulation of Autonomous	UTARRF,	18,000USD	In Progress

	Amphibious Vehicle in Tropical Flooding Rescue Support Mission	Malaysia		(Started 2008)
6.	Fabrication and characterization of a Porous Silicon and its Application as an Optical Biosensor	DRDO INDIA	30,00000 Rs	In Progress (Started 2011)
7.	Performance Appraisal of a FGMOS Transistor by using QD Floating Gate in 45 nm Regime	DST, INDIA	12,00000Rs	In Progress (Started 2011)
8.	Fabrication and Characterization of Long Period fiber Grating and its application as Smart Optical Bio-Chemical sensor	Submitted to DST, INDIA	50,0000 Rs	Under review (Submitted 2011)

Encl: Annexure-1 Research Publications

Annexure-1

RESEARCH PUBLICATIONS

International and National Journal:

Sr. No	Title of Paper	Name of journal	Page No./ Volume/ Issue year
1.	Optical Dispersion curves of a light waveguide with a guiding region cross-section resembling a double convex lens	Optik, International Journal for Light and Electron Optics, Germany	1999 Vol. 110
2.	Weak Guidance Modal Dispersion Curves of an Optical Waveguide Having Double Convex Lens Cross-Section	Microwave Optical technology letters, U. S. A	1999 Vol. 22
3.	An Analytical Investigation of the Dispersion Characteristic of Light guide with an Annular Core Cross Section Bounded by Two Cardioids	Microwave Optical technology letters, USA	1999 Vol.23, U.S.A
4.	Optical Dispersion Curves Of Two Metal Clad Light Guides Having Double Convex Lens Core Cross Sections	Microwave Optical technology letters, USA	2000 Vol.24, U.S.A
5.	Dispersion characteristics of a metal – clad rectangular cored light guide under the weak guidance condition	Optik, International Journal for Light and Electron Optics,	2001 Vol. 111

		Germany	
6.	Correction to "Optical Dispersion curves of two metal-clad light guides having double convex lens core cross-sections.	Microwave Optical technology letters, USA	2002 Vol.38, Issue 6, U.S.A
7.	A correction to "An analysis investigation of the dispersion characteristic of a light guide with an annular core cross-section bounded by two cardioids	Microwave Optical technology letters, USA	2003 Vol.23, U.S.A
8.	Third Order Nonlinear Polymer Materials for Photonics	Material Science Letters, U. S. A.	2003, vol.23. Pp.561-563.
9.	Theoretical investigation of coupling between a laser diode and a lensed fiber	Optik, International Journal for Light and Electron Optics, Germany	Vol.114, 2003
10.	Theoretical analysis of misalignment tolerance between a laser diode and a conically lensed fiber.	Microwave Optical technology letters, USA	2004 Vol.40, pp 191-195, U.S.A
11.	Broadband Spectrum based on Mechanically Induced Cascaded Long Period Fibre Gratings	Microwave Optical technology letters, USA	Volume 44, Issue 5, 2005. Pages 463-465
12.	Spectral shaping of acousto-optic tunable filter: A method to tune the bandwidth, wavelength and attenuation	Microwave Optical technology letters, USA	Vol 48, Issue 9, 2006. Pages 1781-1785
13.	Spectral Shaping using Acousto-Optic Tunable Filters and its application as Dynamic Gain Flatteners	Optik, International Journal for Light and Electron Optics, Germany	Accepted
14.	Packet Loss Rate of an Optical Burst Switch with Nonlinear Optical Loop Mirrors	IEICE Electronics Express, Japan	Vol. 3 (2006), No. 11, pp.243-248
15.	Multiple Parameter Tuning of the Bandwidth, Wavelength and Attenuation of a Fiber-based Acousto-optic Tunable Filter	Optik, International Journal for Light and Electron Optics, Germany	Accepted
16.	Numerical Analysis and Optimization of Remotely Pumped Double Pass Erbium Doped Fiber Amplifier.	IEICE Electronics Express, Japan	Vol. 4, No. 5. pp. 172-178, 2007.
17.	Modeling, Optimization and	Microwave and Optical	vol. 49,

	Experimental Evaluation of Remotely Pumped Double Pass EDFA	Technology Letter, USA	Issue 9, pp. 2257-2261, Sept. 2007
18.	Theoretical Analysis, Optimization and Experimental Evaluation of Dual Function DP R-EDFA	Journal of Russian Laser Research, Russia	vol. 28, no. 3, pp. 294 – 304, 2007.
19.	Numerical and Experimental Analysis of Remotely Pumped Dual-Function EDFA.	International Journal of Microwave and Optical Technology, USA	Vol. 2 No.2. 2007
20.	An efficient buffering-switching technique based integrated NOLM and loop buffer for OBS network	Journal of Optical Communication, JOC Japan	Vol. 28, No.3, Nov, 2007.
21.	Modeling of Remotely Pumped Long Haul OFCS incorporated with Pre-EDFA and DRA	Asian Journal of Physics	Vol. 17, No.1, 2008
22.	Optical Biosensors, Fundamental and Trends.	Journal of Engineering Research and studies.	E-ISBN 0976-7916. 2010
23.	Fiber Bragg Grating Modeling, Characterization and Optimization with different index profiles	International Journal of Engineering Science and Technology	Vol. 2(9), 2010
24.	Cognitive networks: Smart Networks. Journal of Engineering research and studied.	JERS	Vol.I/ Issue II/ Oct.- Dec., 2010.
25.	Analytical Study Of Helically Cladded Optical Waveguide With Different Pitch Angles	International Journal of Advanced Engineering Technology	Vo II, Issue I, January - March, 2010.
26.	A Heuristic Algorithm for Reducing Wavelength Number of Optical WDM Networks	OPTIK, Germany	Accepted, 2011
27.	Dispersion & Cutoff Characteristics of Circular Helically Cladded Optical Fiber	International Journal of Engineering Science and Technology	Accepted 2011
28.	Effect of Helical Pitch Angles on Dispersion Characteristics of Circular Optical Waveguide Having Helical Windings on Core - Cladding Interface	International Journal of Engineering Science and Technology	Accepted 2011
29.	Modelling and characterisation of fiber Bragg grating for maximum reflectivity.	Optik, International Journal for Light and Electron Optics, Germany	Accepted 2011
30.	Simulation of Ciphering Algorithms for GSM Cellular	International Journal of Electronics and	Accepted 2011

	Standard.	Communication Engg. Research and Development	
31.	Security in GSM cellular standard by Cryptographic algorithms.	IFRSA	Accepted 2011
32.	Best Fit Void Filling Segmentation Based Algorithm in Optical Burst Switching Networks”	International Journal of Information Technology and Network Application (IJITNA)	Accepted 2011
33.	Cognitive Networks: Smart Network	Journal of Engineering Research and studied JERS	Vol 1/Issue II., 2011

International Conference:

Sr. No.	Title of Paper	Name of journal	Page No./ Volume/ Issue year
1.	A comparative study of dielectric and metallic convex lens types of optical waveguides under weak guidance approximation	MMU International Symposium on Information and Communications Technologies	2-3 Oct.2003, pp.173-176.
2.	An All Fiber Variable Optical Attenuator using Cascaded Microbend Gratings on Single-Mode Fibers	MMU International Symposium on Information and Communications Technologies	October 2004
3.	Modal Dispersion Characteristics and Waveguide Dispersion of an Optical Waveguide Having Metal clad Double Convex Core Cross-Section	IEEE, LEOS, Malaysian conference on Photonics	2004
4.	Theoretical Analysis of a Metal -Clad Optical Waveguide with a Double Convex Lens Core Structure	MMU International Symposium on Information and Communications Technologies	October 2004
5.	Effect of Etching on the Characteristics of A Fiber-based Acousto-optic Device	International Conference on Materials for Advanced Technologies Singapore (ICMAT 2005)	2005
6.	Analytical study of the characteristics dispersion equations in elliptical step index fiber with helical winding	Asia pacific Conference on Applied Electromagnetic (APACE 2005) Malaysia .	2005

7.	A Numerical Analysis of R-EDFA for Long Haul OFCS	4th International Conference on Science of Electronic, Technologies of Information and Telecommunications (SETIT'07), Tunisia.	2007
8.	Numerical Analysis of remotely pumped single pass EDFA incorporated with a CFBG.	Seventh IASTED International Conferences on Wireless and Optical Communications WOC'2007, Canada.	2007
9.	Numerical Analysis of Pump Propagation Direction in Distributed Raman Amplifiers	ECTI-CON, Thailand	2007
10.	Distributed Raman Amplifiers for Long-Haul OFCS	International Symposium on Information and Communications Technologies (M ² USIC'06) PJ, Malaysia	2006, pp. 188-192
11.	40 Gbps Long Distance DWDM Link Transmission Performance with Direct and External Modulator Using Photonics CAD 1.6	ICP 2010-47, Malaysia	2010
12.	Modeling, Characterization and Optimization of Apodized Fiber Bragg Grating for sensing applications	Progress in Electromagnetic and Research (PIER), Markash, Morakko	Accepted 2011
13.	Optimization of Fiber Bragg Grating Length for maximum reflectivity	International Conference on Communication and Signal Processing - 2011, NIT Calicut, Kerala, India	Accepted 2011
14.	Modeling and characterization of Cascaded Long Period Fiber Gratings for ADM application	PIERS in Suzhou China	Accepted 2011
15.	Comparative study of Spectral response of etched single mode fiber with acoustic wave input and high birefringence fiber loop mirror sensor"	NIT Suratkal	July August 2010

National Conference:

Sr. No.	Title of Paper	Name of journal	Page No./ Volume/ Issue year
1.	Modal dispersion characteristics of an optical waveguide with a guiding region cross-section resembling a double convex lens	National Seminar on Emerging Trends in Electronics and Computers (NSETEC)	March 11-12, 1999
2.	Dispersion Characteristic of Optical Waveguide with Helical Winding for Different Pitch Angle	National Conference on Electronics, Communication & Instrumentation, CSE Jhansi, e-Manthan	2010, pp 71 – 73, 2nd - 3rd April 2010
3.	Comparative study of Micro Bend induced Grating with Pressed and Etched fibres and its effect on mode coupling	National Conference on Electronics and communications, MVP-NCEC-2010. KABGT College of Engineering, NASHIK 13	PP:85-87.march 2010
4.	Implementation of Cryptographic Algorithms for GSM Cellular Standard	National Conference of Knowledge Intelligence and Telematics	KITE ,March 11-12, 2011

Professional Courses Attended:

Sr. No.	Title of Course	Name of Institute	Day/Year
1.	Critique the Rhetoric and Reality of ICT Integration in Learning and Teaching	Center for Extension Education, UTAR, Malaysia	01/2007
2.	The Theory and Practice of Learning and Teaching in Higher Education	Center for Extension Education, UTAR, Malaysia	01/2007
3.	Fundamental Principle and Assessment /Testing	Center for Extension Education, UTAR, Malaysia	01/2007