

Curriculum Vitae



Name : Dr. Prafull Panjabrao Padghan
Qualification : M.Sc., Ph.D.
Designation : Assistant Professor
College : Shri Shivaji Science & Arts College Chikhli, Dist.
Buldana (M.S) PIN-443201
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Date of Birth : 15th January, 1992
Date of joining : 21 Sept. 2019
Nationality : Indian
Academic Qualification Details :

Examination passed	College/Institute	Board/ University	Subject/ Specialization	Year of passing	Division/ Grade
S.S.C.	Shri Shivaji High School Washim	Maharashtra State Board	General	2007	I st
H.S.C.(10+2)	Shri Shivaji Junior College, Washim	Maharashtra State Board	General	2009	II nd
B.Sc.	R. A. College, Washim	Sant Gadge Baba Amravati University, Amravati	Physics, Chemistry and Mathematics	2012	II nd
M.Sc.	Department of Physics, Sant Gadge Baba Amravati University, Amravati	Sant Gadge Baba Amravati University, Amravati	PHYSICS	2014	Higher II nd
Ph.D.	Department of Physics, Sant Gadge Baba Amravati University, Amravati	Sant Gadge Baba Amravati University, Amravati	PHYSICS	2019	----

Experience: Teaching : UG-03Years

Research : 07 Years

Ph.D. Thesis Title : Development of Electronic Speckle Pattern Interferometer for Quantitative Study of Deformations

Ph.D. Supervisor : Dr. K. M. Alti

Area of Research : Optics and Lasers

Ph.D./M. Phil. Guidance :

Paper Published : --09

Paper Presented :International-02 National-05

Book Published : --

Articles in Book Published : --02

Invited Talk& Guest Lectures : --01

Conference/Workshop Attended :International National

Works on Various University Committees:

- 1.Resource Persons for Equipment Handling Skills Programme

Google Scholar:- <https://scholar.google.co.in/citations?user=gVi9WoIAAAAJ&hl=en>

Citations	40
h-index	04
i10-index	01

RESEARCH PROFILE

1. Research Papers Published in Journals:

Sr. No	Title	Name of Authors As mentioned in paper	Journal, Vol. No., Page No. Year	Impact Factor if any	ISSN/ ISBN No.
1.	Electron Trajectories of Electromagnetic Wave Undulator and Reverse Axial Field	Vijay Huse, Prafull Padghan , Dhananjay Bhoyar, Bramh Prakash	International Journal of Scientific Research in Science and Technology, 12 (8), 769-772, (2025)	----	2395-602X
2.	Principle Component Analysis of Speckle Interferograms of Thermally Deformed Objects	Prafull Padghan , Nikhil Bhagat, Kamlesh Alti, Abhay Khamborkar	Advances in Photonics and Electronics: Innovations for Smart and Sustainable Development, 43-49, (2024)	----	9783031680380
3.	Using Speckle Contrast as a Tool to Track Static and Dynamic Modifications of the Surface	Prafull Padghan , Nikhil Bhagat, Kamlesh Alti, Abhay Khamborkar	Advances in Photonics and Electronics: Innovations for Smart and Sustainable Development, 51-56, (2024)	----	9783031680380
4.	Effect of Digital Filtering on the Analysis of Surface Deformations using Electronic Speckle Pattern Interferometer	P. P. Padghan , N.B. Bhagat, K.M. Alti	AIP: Conference Proceedings, 2369(1),020030,(2021)	----	978-0-7354-4121-7
5.	Electronic Speckle Pattern Interference technique for measuring Thickness of metallic nano thin films,	N.B. Bhagat, P.P. Padghan , R. Kesarwani, A. Khare, K. M. Alti	Materials Today, (2021)	---	2214-7853
6.	Ultrasonic Investigation of Drug Zingiber officinale with Metal Ions as a Function of Concentration	Pallavi B. Nalle, Sangita U. Shinde, N. B. Thakare, and Prafull P. Padghan	Macromolecular Symposia 392, 2000080 (2020)	0.6	1521-3900
7.	Measurement of nanoscale surface roughness using electronic speckle pattern interferometer	P. P. Padghan , V. D. Pande, P. U. Ingle, S.S. Sen, A.K. Gade, and K. M. Alti	AIP Conference Proceedings 2100, 020062 (2019)	---	978-0-7354-1830-1
8	Comparative study of temporal phase Shifting algorithms and their effect on Surface profiles	P. P. Padghan , K. M. Alti	AIP Conference Proceedings 2100, 020072 (2019)	---	978-0-7354-1830-1

9.	Quantification of nanoscale deformations using electronic speckle pattern interferometer	P. P. Padghan, K.M. Alti	Optics and Laser Technology Vol. 107 pp.72-79 (2018)	3.319	0030-3992
10.	Impact of multiple usages of digital filters on speckle contrast and phase maps	P. P. Padghan, K.M. Alti	Optik Vol.154 pp.610-615 (2018)	1.914	0030-4026
11.	Quantitative Study of Deformations using Electronic Speckle Pattern Interferometer (ESPI),	P. P. Padghan, K.M. Alti	Research & Reviews: Journal of Physics, Volume 4, Issue 2, pp.1-7 (2015)	---	2278-2265
12.	Experimental Realization Of Multiple All Optical Universal Logic Gates Using Array Illuminator,	P. P. Padghan, K.M. Alti	International Journal Of Pure And Applied Research In Engineering And Technology Volume2(9) pp.238-245	4.2	2319-507X

2. Full Papers in Conference proceedings:

Sr. No.	Name of Conference	Level	Title of Paper	Name of Authors as mentioned in paper	Place & Date	ISSN/ ISBN No.
1	International conference on Advances in Materials Science (ICAMS-2016)	International	Calibration and testing of low cost optical phase shifter	P. P. Padghan, K.M. Alti	Jath, 07-08 Dec. 2016	978-93-5254-490-5
2	International conference on Advances in Materials Science (ICAMS-2016)	International	Effect of rotational Wiggling on speckle contrast	P. P. Padghan, P. P. Rathi and K.M. Alti	Jath, 07-08 Dec. 2016	978-93-5254-490-5
3	National Laser Symposium (NLS-24), 2015	National	Effect of digital filtering on speckle contrast	P. P. Padghan, K.M. Alti	02- 05 Dec. 2015	978-81-903321-6-3
4	National Laser Symposium (NLS-24), 2015	National	Nearly periodic fluctuations in static speckle pattern	P. P. Padghan, K.M. Alti	02-05 Dec. 2015	978-81-903321-6-3
5	National Conference on Novel synthesis of Advanced materials and their application (NSAMA-2015)	National	Imaging the refractive change in air plasma electronic speckle pattern interferometer(ESPI)	P. P. Padghan, K.M. Alti	16 Feb. 2015	978-83-82962-51-9
6	National conference on novel synthesis of advance material - 2015	National	Two dimensional Electronic beam and refractive index change profiles of electric spark using Michelson's interferometer	P. P. Padghan, Mohd. Aqueel, K.M. Alti	20 Dec. 2014	978-93-82962-51-9
7	National Conference of Recent Trends in Mathematics and Physics Application - 2014	National	Fabrication of array illuminator	P. P. Padghan, K.M. Alti	2014	978-81-929160-2-6

3. Papers presented in Conferences/Seminar/Symposia /Workshop:

Sr. No.	Title of Paper	Title of Event	Level	Date	Organizer
1	Effect of Digital Filtering on the Analysis of Surface Deformations using Electronic Speckle Pattern Interferometer,	National Conference on Physics and Chemistry of Materials(NCPCM-2020)	National	14-16 Dec. 2020	Department of Physics, Govt. Holkar Science College, Indore
2	Measurement of nanoscale surface roughness using electronic speckle pattern interferometer,	National Conference on Physics and Chemistry of Materials(NCPCM-2018)	National	27-28Dec. 2018	Department of Physics, Govt. Holkar Science College, Indore
3	Comparative study of temporal phase shifting algorithms and their effect on Surface profiles,	National Conference on Physics and Chemistry of Materials(NCPCM-2018)	National	27-28Dec. 2018	Department of Physics, Govt. Holkar Science College, Indore
4	Effect of digital filtering on speckle contrast	National Laser Symposium (NLS-24)	National	02-05 Dec.2015	RRCAT, Indore
5	Nearly periodic fluctuations in static speckle pattern	National Laser Symposium (NLS-24)	National	02-05 Dec.2015	RRCAT, Indore
6	Imaging the refractive change in air plasma electronic speckle pattern interferometer (ESPI)	National Conference on Novel synthesis of Advanced materials and their application (NSAMA-2015)	National	16 Feb. 2015	Department of Physics, Science College, Maregaon
7	Two dimensional electronic beam and refractive index change profiles of electric spark using Michelson's interferometer	National conference on novel synthesis of advance material -2015	National	20Dec. 2014	Dhote Bandhu Science College, Gondia
8	Fabrication of array illuminator	National Conference of Recent Trends in Mathematics and Physics Application - 2014	National	2014	Shankarlal Khandelwal college of Science Akola.

4. Conferences/Seminar/ Symposia/Workshop Attended:

Sr. No.	Theme	Level	Date	Organizer
1	National Conference on Physics and Chemistry of Materials (NCPCM-2020)	National	14-16Dec.2020	Department of Physics, Govt. Holkar Science College, Indore
2	National Conference on Physics and Chemistry of Materials (NCPCM- 2018)	National	27-28Dec.2018	Department of Physics, Govt. Holkar Science College, Indore

3	International conference on Advances in Materials Science (ICAMS-2016)	International	07-08Dec.2016	Raje Ramrao Mahavidyalaya,Jath
4	School of Optics, Microscopy and Spectroscopy at the Indian Institute of Science, Bangalore	National	18thto22ndJuly 2016.	I. I. Sc. Bangalore
5	Workshop on research and methodology	University Level	14-19March 2016	SGBAU Amravati
6	National Laser Symposium(NLS-24),	National	02-05Dec.2015	RRCAT, Indore
7	National Conference on Novel synthesis of Advanced materials and their application (NSAMA-2015)	National	16 Feb.2015	Department of Physics, Science College, Maregaon
8	National conference on novel synthesisofadvancematerial-2015	National	20Dec.2014	Dhote Bandhu Science College, Gondia
9	National Conference of Recent Trends in Mathematics and Physics Application - 2014	National	2014	Shankarlal Khandelwal college Akola.

5. Invited Lectures & session Chairmanship:

Sr. No.	Title	Academic Session	Event	Level	Date	Organizer
1	Examiner	2020-21	Online Seminar Competition	University	25/02/2020	M. S. P. Arts, Science and K.P.T Commerce College, Manora Dist.Washim

6. Training Courses, Teaching-Learning-Evaluation Technology Programmes, Faculty Development Programmes (not less than one week duration)

Sr. No.	Programme	Duration	Organized By
1	Faculty Development Program (Online) University of Delhi	May18-June 03, 2020	Ramanujan College, Delhi
2	Faculty Development Program (Guru-Dakshta)	02to31August2021	HRDC, Savitribai Phule Pune University, Pune

7. Articles/Chapters published in Book:

Sr. No.	Title & Page No.	Book Title, Editor & Publisher	ISSN/ISBN No.	Authors	Whether Main authors
1	Simple Demonstration Of Quantum Eraser	Emerging Trends in Science and Technology, Dr. Mukesh Kumar Kumawat Dr. Nagendra Singh, Bhumi Publishing	978-81-951982-2-1	Dr. P. P. Padghan	No
2	Temporal Phase Shifted Electronic Speckle Pattern Interferometer Using Standardized Optical Phase Shifter	Emerging Trends in Science and Technology, Dr. Mukesh Kumar Kumawat Dr. Nagendra Singh, Bhumi Publishing	978-81-951982-2-1	Dr. P. P. Padghan	No

8. Events Organized:

Sr. No.	Events	Level	Funded By	Date	Position
1	University Level Innovative Model Making Competition 2022	University	SSSAC, Chikhli	30/09/2022	Coordinator
2	Add On Course on “Renewable Energy”	-	-	15-21 Sep. 2022	Coordinator
3	C.V. Raman Lecture Series on Condensed Matter Physics On the Occasion of National Science Day	-	-	23-28 Feb. 2022	Coordinator
4	Guest Lecture on Fun with Optics	-	-	01/03/2021	Coordinator
5	State level poster competition on Energy Awareness & Environment Conservation	State	-	12/03/ 2020	Member
6	National Webinar on Career Opportunities in Physical & Mathematical Sciences	National	-	29/07/2020	Co-Coordinator
7	C. V. Raman Lecture Series on Concepts of Modern Physics On the Occasion of National Science Day	-	-	22-27/02/2021	Co-coordinator
8	National Workshop on Use of Virtual Laboratory in Teaching & Learning	National	-	09–10/08/2021	Member & Technical support
9	State Level General Knowledge Competition For U.G.&P.G. Students	State	-	26/02/2021	Member & Technical support
10	Guest Lecture for UG, PG & Research Student On “Research Methodology”	-	-	08/09/2021	Technical support
11	Online One Week Certificate Course On Renewable Energy	State	-	15-21/10/2021	Coordinator
12	One Day National E-conference On “Relevance of Socio-Religious Reforms Movement in Present Context”	National	-	22/09/2021	Technical support

9. Special Achievement: Patent

Sr. No	Patent Title	Name of Applicant(s)	Patent No.	Agency/Country	Status
1.	System for predicting degree of maturity of agriculture product	1. Dr. Prafull P. Padghan 2. Dr. Kamlesh M. Alti 3. Sant Gadge Baba Amravati University, Amravati	201921013451	India	Application Published