

## 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  
**Address** : Samata Nagar, Allada Plot, Washim Tq. Distt.  
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**E-Mail** : [pppadghan5@gmail.com](mailto:pppadghan5@gmail.com)  
**Date of Birth** : 15<sup>th</sup> 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 <sup>St</sup>
H.S.C.(10+2)	Shri Shivaji Junior College, Washim	Maharashtra State Board	General	2009	II <sup>nd</sup>
B.Sc.	R. A. College, Washim	Sant Gadge Baba Amravati University, Amravati	Physics, Chemistry and Mathematics	2012	II <sup>nd</sup>
M.Sc.	Department of Physics, Sant Gadge Baba Amravati University, Amravati	Sant Gadge Baba Amravati University, Amravati	PHYSICS	2014	Higher II <sup>nd</sup>
Ph.D.	Department of Physics, Sant Gadge Baba Amravati University, Amravati	Sant Gadge Baba Amravati University, Amravati	Physics	2019	----

## Curriculum Vitae

**Experience: Teaching : UG-02 Years**

**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 : Speckle Metrology, All Optical Logic Gates**

**Ph.D./M.Phil. Guidance :**

**Paper Published : 09**

**Paper Presented : International - 02 National -05**

**Book Published : --**

**Articles Published : 02**

**Invited Talk & Guest Lectures : 01**

**Conference/Workshop Attended : International National**

**Research Project Completed :**

Minor Research Project : --

Major Research Project : --

**Position Held :--**

**Awards/Scholarships :--**

### **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 24

h-index 3

i10-index 1

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## 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.	Effect of Digital Filtering on the Analysis of Surface Deformations using Electronic Speckle Pattern Interferometer,	<b>P. P. Padghan</b> , N.B. Bhagat, K.M. Alti	AIP: Conference Proceedings, 2369 (1), 020030, (2021)	----	978-0-7354-4121-7
2.	Electronic Speckle Pattern Interference technique for measuring thickness of metallic nano thin films,	N.B. Bhagat, <b>P.P. Padghan</b> , R. Kesarwani, A. Khare, K.M. Alti	Materials Today, (2021)	---	2214-7853
3.	Ultrasonic Investigation of Drug Zingiberofficinale with Metal Ions as a Function of Concentration,	Pallavi B. Nalle, Sangita U. Shinde, N. B. Thakare, and <b>Prafull P. Padghan</b>	Macromolecular Symposia 392, 2000080 (2020)	0.6	1521-3900
4.	Measurement of nanoscale surface roughness using electronic speckle pattern interferometer,	<b>P. P. Padghan</b> , 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
5.	Comparative study of temporal phase shifting algorithms and their effect on surface profiles,	<b>P. P. Padghan</b> , K. M. Alti	AIP Conference Proceedings 2100, 020072 (2019)	---	978-0-7354-1830-1
6.	Quantification of nanoscale deformations using electronic speckle pattern interferometer,	<b>P. P. Padghan</b> , K. M. Alti	Optics and Laser Technology Vol. 107 pp. 72–79 (2018)	3.319	0030-3992
7.	Impact of multiple usages of digital filters on speckle contrast and phase maps,	<b>P. P. Padghan</b> , K. M. Alti	Optik Vol. 154 pp. 610-615 (2018)	1.914	0030-4026
8	Quantitative Study of Deformations using Electronic Speckle Pattern Interferometer (ESPI),	<b>P. P. Padghan</b> , K. M. Alti	Research & Reviews: Journal of Physics, Volume 4, Issue 2, pp. 1-7 (2015)	---	2278-2265
9.	Experimental Realization Of Multiple All Optical Universal Logic Gates Using Array Illuminator,	<b>P. P. Padghan</b> , K. M. Alti	International Journal Of Pure And Applied Research In Engineering And Technology Volume 2 (9) pp. 238-245	4.2	2319-507X

## Curriculum Vitae

### 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	<b>P. Padghan,</b> 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	<b>P. Padghan,</b> 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	<b>P. Padghan,</b> 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	<b>P. Padghan,</b> 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)	<b>P. Padghan,</b> 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	<b>P. Padghan,</b> 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	<b>P. Padghan,</b> K. M. Alti	2014	978-81-929160-2-6

## Curriculum Vitae

### 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	27-28 Dec. 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	27-28 Dec. 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	20 Dec. 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- 16 Dec. 2020	Department of Physics, Govt. Holkar Science College, Indore
2	National Conference on Physics and Chemistry of Materials (NCPCM-2018)	National	27-28 Dec. 2018	Department of Physics, Govt. Holkar Science College, Indore
3	International conference on Advances in Materials Science (ICAMS-2016)	International	07-08 Dec. 2016	Raje Ramrao Mahavidyalaya, Jath

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4	School of Optics, Microscopy and Spectroscopy at the Indian Institute of Science, Bangalore	National	18th to 22nd July 2016.	IISc Bangalore
5	Workshop research and methodology	University Level	14-19 March 2016	SGBAU Amravati
6	National Laser Symposium (NLS-24),	National	02- 05 Dec. 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 synthesis of advance material - 2015	National	20 Dec. 2014	Dhote Bandhu Science College, Gondia
9	National Conference of Recent Trends in Mathematics and Physics Application - 2014	National	2014	Shankarlal Khandelwal college of Science 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. Year wise Research Guidance:

Sr. No.	Year	Degree (M.Phil/PhD)	No. of Students		
			Enrolled	Awarded	Submitted

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### 7. Research Projects (Minor/Small Grants):

Sr. No.	Title	Major/Minor	Funding Agency	Period	Amount Sanctioned	Sanctioned Letter	Status

### 8. 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	May 18 - June 03, 2020	Ramanujan College, Delhi
2			

### 9. Book Published

Sr. No.	Title & Page No.	Authors	Type of Book	Publisher	ISSN/ISBN No	No. of Co- authors

### 10. Editorial Board Member:

Sr. No.	Title & Page No.	Type of Books	Publisher	ISSN/ISBN No	No. of Co- authors

### 11. 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

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### 12. Events Organized:

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

### 13. 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

### 14. Other Memberships: