



**Rayat Shikshan Sanstha's**  
**Yashavantrao Chavan Institute of Science, Satara (Autonomous)**  
**Lead College of Karmaveer Bhaurao Patil University, Satara**

**Faculty Profile**

❖ **General information**

**Name** : Miss Nikam Sushama Vijay  
**Designation** : Assistant Professor  
**Department** : Nanoscience and Technology  
**Educational Qualification** : M. Sc. Electronics (Ph. D. perusing)  
**Date of Appointment** : 09/07/2012  
**Teaching Experience** : UG: 10 years  
PG: 02 years  
**Research Experience** : 5 years  
**Research Area** : Fuzzy Logic, Embedded System, VLSI, Thin film, Nanomaterials



❖ **Educational Qualification Details (undergraduate onwards)**

Sr. No.	College/University	Degree	Subjects	Year	Class/ Percentage
1	Y. C. I. S. Satara, Shivaji University Kolhapur	B. Sc.	Electronics	2007	First Class
2	S. M. M. Akluj, Solapur University, Solapur	M. Sc.	Electronics (Instrumentation)	2009	Second Class
3	Shivaji University, Kolhapur	Ph. D.	Electronics	Perusing	-

❖ **Academic and Administrative Responsibilities**

Sr. No.	Position	Organization	Date/Duration
1	Incharge – Department of Nanoscience and Technology	Y. C. Institute of Science Satara	18 July 2014 to 30 April 2020
2	Member, Entrepreneurship Development Cell	Y. C. Institute of Science Satara	2020-21, 2022-23
3	Departmental Co-ordinator, Institution Innovation Cell,	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2020-21
4	Co-ordinator, Diploma courses	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2020-21

5	Co-ordinator, Skill courses	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2020-21
6	Co-ordinator, Value-added, Add-on, Capsule Courses	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2020-21
7	Member, Green and Energy Efficient campus committee	Y. C. Institute of Science, Satara	2022-23
8	Member, Quality Improvement Program Committee	Y. C. Institute of Science, Satara	2022-23
9	Departmental Research Co-ordinator	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2022-23
10	Departmental Co-ordinator, YC-fair cum Science Exhibition	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	2017-18, 18-19,2022-23
11.			
<b>Academic</b>			
1	Co-ordinator- State level Intercollegiate competition in Nanotechnology	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	1 <sup>st</sup> Feb. 2017
2	Co-Convener- National Conference on Recent Trends in Nanomaterials	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	28 <sup>th</sup> Sept. 2017
3	Co-ordinator- Intercollegiate Poster Presentation Competition Nanoworld-2018	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	1 <sup>st</sup> Jan. 2018
4	Member, Local Organizing Committee, National Webinar on Nanodevice fabrication, Product Design and Start ups	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	31 <sup>st</sup> Oct 2020

5	Program Co-ordinator, National Webinar on Industrial Nanotechnology	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	20 <sup>th</sup> March 2021
6	Co-ordinator, International Conference on Nanobiotechnology 2023	Department of Nanoscience and Technology, Y. C. Institute of Science, Satara	17 <sup>th</sup> and 18 <sup>th</sup> March 2023

❖ **Awards/Honors/Recognitions/Scholarship etc.:** Nil

❖ **Membership to Professional Organizations/Associations:** Nil

❖ **Worked as Editor/Reviewer to Journals/Books/Proceedings etc.** Nil

❖ **Research Projects (Ongoing/Completed)**

Sr. No.	Title of Project	Duration	Amount Sanctioned (in Lakhs)	Agency	Status (Ongoing/ Completed)
<b>Major Research Project</b>					
1					
<b>Minor Research Project</b>					
1	Development of functional nanomaterials for Toxic Gas sensing	10/03/2021 to 10/03/2022	1,25,000	RUSA In-house Project Scheme, Y.C.I.S.Satara	Completed

❖ **Research Guidance: Nil**

- Number of students (M.Phil)

1) Completed:

2) Registered:

- Number of students (Ph.D.)

1) Completed:

2) Registered:

❖ **Details of Research Publications**

A) Patent: Nil

B) Books/Book Chapters: Nil

C) Datasets Submission: Nil

**D) Research papers:**

Sr. No	Title of paper	Journal/proceeding details (Name, volume, page no, year of publication etc.)	ISSN No	Listed in Scopus/Web of Science/ UGC Care	Impact factor (If any)
1	Review on the effect of preparative parameters of spray pyrolysis technique on optical and electrical properties of Zinc Oxide thin film	International Journal of Advance Research, Ideas and Innovations in Technology, 7(4) 2021, PP. 1238-1244	2454-132X	-	6.078
2	Structural Morphological and Optical attributes of ZnO thin Films deposited via Spray Pyrolysis Process: Impact of Molarity Variation	IOP: Material Science and Engineering, 1258 (2022) 012012	1757-899X	Scopus	0.48
3	Synthesis of ZnO nanoparticles for antibacterial applications.	Bulletin of Environment, Pharmacology and Life Sciences Vol 1, 2023	2277-1808	UGC care list	
4	Parameters of banana at various stages that affects supply chain and value chain.	Bulletin of Environment, Pharmacology and Life Sciences Vol 1, 2023	2277-1808	UGC care list	

**E) Paper Presentation in Conference /Seminar/ Symposia:**

Sr. No	Title of paper	Name of the Conference /Seminar/ Symposia Details (Title, Date, Page No etc.)	Level (Intl/Natl/State /Uni etc.)	Organizing institute
1.	Synthesis of Cadmium Sulfide Nanoparticles	National Conference on Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development, 5 <sup>th</sup> -6 <sup>th</sup> Jan. 2018, Pp 114	National	Dept. of Botany, Biotechnology and IQAC, Y. C. Institute of Science Satara

2	Effect of preparative parameters on properties of thin films using spray pyrolysis technique.	International Conference on Multifunctional and Hybrid Materials for Energy and Environment 29 <sup>th</sup> -31 <sup>st</sup> Jan. 2020	International	Organized by Dept. of Physics and Astrophysics Y. C. Institute of Science (Autonomous), Satara
2	Review: Effect of preparative parameters on properties of thin films using spray pyrolysis technique.	International E-Conference on 'Ethical and Quality Aspects in Nanoscience and Nanotechnology Research' 20 <sup>th</sup> June 2020	International	Vasantrao Naik Arts, Commerce and Science College Shahada, Dist Nandurbar. And Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon
3	Synthesis of Zinc Oxide Nanoparticles by Sol-Gel method	International Conference on Emerging Trends and Challenges in Electronics and Computing 4 <sup>th</sup> – 6 <sup>th</sup> Mar. 2021, Pp. 31	International	Dept. of Electronics Y. C. Institute of Science (Autonomous), Satara
4	Effect of molarity variation on structural, morphological and optical properties of ZnO thin film deposited Via spray pyrolysis technique.	4 <sup>th</sup> International Conference on Materials science and manufacturing technology. 8 <sup>th</sup> – 9 <sup>th</sup> Apr. 2022	International	Akshaya college of Engineering and Technology and Diligentech Solutions, Coimbatore, Tamil Nādu, India.
5	Fuzzy Interface system to predict the Optical Properties of ZnO Thin Film	Two days International Conference on Statistics and Data science (SDS 2023) 24 <sup>th</sup> and 25 <sup>th</sup> Feb 2023.	International	Sadguru Gadage Maharaj College, Karad, Maharashtra, India.
6	Fuzzy Interface system to predict the Optical	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp.	International	Department of Nanoscience and Technology; and

	Properties of ZnO Thin Film	17		Biotechnology, Y. C. Institute of Science, Satara
<b>7</b>	Impact of Spray Pyrolysis Process Parameters on Transmittance and Bandgap of ZnO Thin Films	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp. 58	International	Department of Nanoscience and Technology; and Biotechnology, Y. C. Institute of Science, Satara
<b>8</b>	Synthesis of ZnO Thin Films for Hydrophobic Applications	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp. 66	International	Department of Nanoscience and Technology; and Biotechnology, Y. C. Institute of Science, Satara
<b>9</b>	Review of Various Methods to Test the Ripening Stages of Banana	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp. 93	International	Department of Nanoscience and Technology; and Biotechnology, Y. C. Institute of Science, Satara
<b>10</b>	Analysis of Physicochemical Changes During the Ripening of Cavendish Banana and Velchi Banana	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp. 94	International	Department of Nanoscience and Technology; and Biotechnology, Y. C. Institute of Science, Satara
<b>11</b>	A Review on Size Dependent Microbial Activity of Silver Nanoparticles for Water Purification	International Conference on Nanobiotechnology 2023, 17 <sup>th</sup> and 18 <sup>th</sup> March 2023, Pp. 119	International	Department of Nanoscience and Technology; and Biotechnology, Y. C. Institute of Science, Satara

## **F) Citation Index**

	<b>Google Scholar</b>	<b>Scopus</b>	<b>Web of Science</b>
<b>Citations</b>			
<b>h-index</b>			
<b>i10-index</b>			

### **❖ Participation in Orientation/Refresher/FDP/Short Term/Training Programs:**

<b>Sr. No.</b>	<b>Name of the programme</b>	<b>Organizing institute</b>	<b>Date</b>
1	One week FDP on E-Content Development and Delivery, Research Methodology and Autonomy	Kamala Neharu Mahavidyalaya, Nagpur and Modern college of Arts, Commers and Science, Shivajinagar Pune	27 <sup>th</sup> July – 1 <sup>st</sup> Aug. 2020

### **❖ Participation in Conference/Seminar/Symposia/Workshop/Any other programs:**

<b>Sr. No.</b>	<b>Name of the event</b>	<b>Organizing institute</b>	<b>Level (Intl/Natl/ State/Uni/Local etc.)</b>	<b>Date</b>
1	National Conference on Recent trends in Nanomaterials	Dept. of Nanoscience and Technology, Y. C. Institute of Science Satara	<b>National</b>	28 <sup>th</sup> Sept. 2017
2	International workshop on Abroad Research Opportunities for students.	Y.C. Institute of Science, Satara and Savitribai Phule Mahila Mahavidyalaya, Satara.	International	8 <sup>th</sup> Mar. 2017
3	International Conference on Recent Advances in Renewable Energy and Hygiene Devices	Y. C. Institute of Science Satara	International	5 <sup>th</sup> -6 <sup>th</sup> Mar.2018
4	One day workshop on Innovative Research and Patenting Methodology	IQAC, Y. C. Institute of Science Satara	Local	10 <sup>th</sup> Feb. 2018
5	International Conference on Multifunctional and Hybrid Materials for Energy and Environment	Dept. of Physics and Astrophysics Y. C. Institute of Science (Autonomous), Satara	International	29 <sup>th</sup> -31 <sup>st</sup> Jan. 2020
6	International E-Conference on 'Ethical and Quality Aspects in Nanoscience and	Vasantrao Naik Arts, Commerce and Science College Shahada, Dist	International	20 <sup>th</sup> June 2020

	Nanotechnology Research'	Nandurbar. And Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon		
7	International Webinar on "Hyphenated Techniques in Detection of Smart Materials"	D. P. Bhosale college Koregaon, Satara (MH) India in collaboration with Uni. of Berlin, Germany	International	11 <sup>th</sup> July 2020
8	National Webinar on Nanodevice fabrication, Product Design and Start ups	Dept. of Nanoscience and Technology, Y. C. Institute of Science (Autonomous), Satara	National	31 <sup>st</sup> Oct 2020
9	Webinar on Fuzzy logic for fundamental Research	Dttajirao Kadam Arts, Commers and Science college, Ichalkaranji	National	22 <sup>nd</sup> Jan. 2021
10	National Seminar on 'National Education Policy-2020'	IQAC and IIC under the aegis of UGC-Paramarsh Schme, Y. C. Institute of Science Satara	National	23 <sup>rd</sup> Jan 2021
11	Five days UGC STRIDE Online Lecture Series on Green Electronics	Department of Electronics, Shivaji University Kolhapur	University	10 <sup>th</sup> -14 <sup>th</sup> Feb.2021
12	International Webinar on Innovative Research Trends in Green Electronics and Allied Technology	Dept. of Electronics Science, T. C. college Baramati, Pune	International	2 <sup>nd</sup> - 3 <sup>rd</sup> March 2021
13	International Conference on Emerging Trends and Challenges in Electronics and Computing	Dept. of Electronics Y. C. Institute of Science (Autonomous), Satara	International	4 <sup>th</sup> - 6 <sup>th</sup> Mar. 2021
14	National Webinar on Industrial Nanotechnology	Dept. of Nanoscience and Technology, Y. C. Institute of Science (Autonomous), Satara	Satara	20 <sup>th</sup> March 2021
15	Workshop on Industrial Automation	Department of Electrical Engineering SMSMP Institute of Technology and Research Akulj	National	1 <sup>st</sup> April 2021
16	One day online workshop on A Qualitative Research Approach	IQAC and QIP, Y. C. Institute of Science Satara	National	22 <sup>nd</sup> May 2021



17	One day online workshop on Best Practices in Examination and Evaluation	IQAC, Y. C. Institute of Science Satara	Local	27 <sup>th</sup> May 2021
18	IPR awareness/training program under the special mission called “National Intellectual Property Awareness Mission (NIPAM)”	Office of Controller General of Patents, Designs and Trade Marks	Local	30 <sup>th</sup> Jan 2023
19	One Day Webinar on Emerging Global Trends in Embedded System	T C college Baramati	State	31 <sup>st</sup> Jan 2023
20	MS-DEED Level 1 In-person Workshop on 'Introduction to Innovative Pedagogies for College Teachers'	Indian Institute of Science Education and Research and Maharashtra State Faculty Development Academy	State	15 <sup>th</sup> to 17 <sup>th</sup> Feb 2023

❖ **Resource person in Conference/Seminar/Workshop/Any other programs:**

S. No.	Title of the event	Level (Intl/Natl/State/Uni./local etc.)	Organizer	Date
1	Vidynan Manch Shibir (2018-19)	Local	Y. C. Institute of Science Satara	17/11/2018

❖ **Chaired Sessions in Conference/Seminar/Workshop etc.:Nil**

S. No.	Title of the event	Level (Intl/Natl/State/Uni./local etc.)	Organizer	Date
1				

**Signature of Faculty**