



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

**Faculty Profile**

❖ **General information**

**Name** : Mr. Suhas Hari Sutar  
**Designation** : Assistant Professor  
**Department** : Nanoscience and Technology  
**Educational Qualification** : M.Sc.  
**Date of Appointment** : 23/09/2024  
**Teaching Experience** : UG: 02 years  
PG: 03 years  
**Research Experience** : 4 years  
**Research Area** : Materials Science



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

Sr. No.	College/University	Degree	Subjects	Year	Class/Percentage
1	Shri. Shiv Shahu Mahavidyalaya, Sarud	B.Sc.	Physics	2017	I <sup>st</sup> Class
2	Yashavantrao Chavan Institute of Science, Satara. (Shivaji University Kolhapur.)	M.Sc.	Physics	2019	I <sup>st</sup> Class
3	Shivaji University Kolhapur.	Ph.D.	Physics	Pursuing	NA

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

Sr. No.	Name of the award/honor/recognition	Awarding Organization	Date and Year
1	Senior Research Fellow (SRF)	Mahajyoti, Nagpur	October, 2021

❖ **Details of Research Publications**

**A) Patent**

Sr. No.	Title	Patent No.	Indian/US/Any other	Granting date
1	Metal Organic Framework Derived Cobalt Phosphate Synthesized by SILAR for Oxygen Evolution Reaction Application	202321090212	Indian	26-01-2024

2	A Method for Synthesis of Carbon Quantum Dot Decorated Nickel Cobalt Layered Double Hydroxide Electrocatalyst for Oxygen Evolution Reaction.	202421002826	Indian	23-02-2024
3	A METHOD FOR SYNTHESIS OF REDUCED GRAPHENE OXIDE- NICKEL OXIDE NANOFKAKES COMPOSITE ELECTRODE FOR ELECTROCHROMIC SUPERCAPACITOR APPLICATION	202421013237	Indian	22-03-2024

### **B) Books/Book Chapters**

Sr. No	Title	Publisher	Year of Publication	ISBN No	Type (Reference/Text)
1	Recent Trends in Materials for Advanced Technologies	Aavishkar Publications	2022	978-81-96470-7-0	Reference

### **C) Research papers:**

Sr. No	Publication Details
1.	Hydrothermally Prepared Vanadium Oxide Nanostructures for Photocatalytic Application Bapuso M. Babar, Komal B. Pisal, Suhas. H. Sutar, Sarfraj H. Mujawar, Laxman D. Kadam, Habib M. Pathan, Udayraj T. Pawar, Prakash M. Kadam and Pramod S. Patil- ES Energy & Environment 2022, 15, 82-91 ( <a href="https://dx.doi.org/10.30919/ese8c639">https://dx.doi.org/10.30919/ese8c639</a> )
2.	Feasibility of Nickel Oxide as an Electrochromic Pseudocapacitor Device: Review Suhas. H. Sutar, Bapuso M. Babar, Komal B. Pisal, Sarfraj H. Mujawar ( <a href="https://doi.org/10.1016/j.est.2023.109035">https://doi.org/10.1016/j.est.2023.109035</a> ) (Published at Journal of Energy Storage <b>I.F. 9.4</b> )
3.	Vanadium pentoxide (V <sub>2</sub> O <sub>5</sub> )-reduced graphene oxide (rGO) composite based chemiresistive gas sensor for NO <sub>2</sub> sensing B. M. Babar, S. H. Sutar, S. H. Mujawar, V. L. Patil, L. D. Kadam, P. M. Kadam and P. S. Patil ( <a href="https://doi.org/10.1016/j.mseb.2023.116827">https://doi.org/10.1016/j.mseb.2023.116827</a> ) (Published at Material Science and Engineering B <b>I.F. 3.5</b> )

4.	Symmetric Supercapacitor Based on Biosynthesized Nanosheets of Reduced Graphene Oxide (rGO): Characterization and Electrochemical Behavior Avinash Ashok Survase, Suhas Hari Sutar, Shivaji Bhaurao Ubale, Shivangi Shivraj Kanase ( <a href="https://doi.org/10.1016/j.jelechem.2023.118020">https://doi.org/10.1016/j.jelechem.2023.118020</a> ) (Published at Journal of Electroanalytical Chemistry <b>I.F. 4.5</b> )
5.	Electrochemical and Impedance Analysis of Nickel Oxide Nanoflakes based Electrodes for Efficient Chromo Supercapacitors Suhas. H. Sutar, Sushant B. Patil, Love Bansal, Shivaji B. Sadale, Rajesh Kumar, Sarfraj H. Mujawar ( <a href="https://doi.org/10.1016/j.electacta.2024.144614">https://doi.org/10.1016/j.electacta.2024.144614</a> ) (Published at Electrochimica Acta <b>I.F. 6.6</b> )
6.	Electrodeposited Tungsten Trioxide (WO <sub>3</sub> ) Thin Films for Electrochromic Applications Chemsci advances (2024) P. S. Chavan, P.S. Shedge, S.S. Deshmukh, R. R. Bhandalkar, S.H. Sutar, S. H. Mujawar

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

<b>Sr. No.</b>	<b>Title of the paper</b>	<b>Name of the Conference</b>	<b>Level (Int/Natl/Stat/Uni)</b>	<b>Organizer</b>
1.	Highly Nanoporous Nickel Oxide Thin Film by Hydrothermal Route for Bifunctional Electrochromic Energy Storage Application	Innovation in Smart & Technomaterials	International	SGM College, Karad on 16 <sup>th</sup> and 17 <sup>th</sup> January 2023
2.	Effect of electrolyte concentration on hydrothermally prepared nanoporous nickel oxide coatings for bifunctional electrochromic supercapacitor	International Conference on Nanobiotechnology-2023	International	YC College, Satara on 17 <sup>th</sup> and 18 <sup>th</sup> March 2023
3.	Hydrothermally prepared nanoporous nickel oxide coatings for bifunctional electrochromic supercapacitor	Emerging Trends in Fabrication of Nanomaterials and Their Applications	National	Prof. Dr. N. D. P College, Malakapur on 29 <sup>th</sup> April 2023

4.	Optimization of Reaction Time for Hydrothermally Prepared Nanoporous Nickel Oxide Coatings for Bifunctional Electrochromic Supercapacitor	National Conference on Physics of Materials and Materials based Device Fabrication	National	Shivaji University, Kolhapur on November 25-26, 2023
5.	Pseudocapacitive Performance of Chemical Bath Deposited Ni (OH) <sub>2</sub> Nanoporous Thin Film	Integrative Nanotechnology Perspectives for Multidisciplinary Applications 2022	International	AAAC and HBGSC, Manchar, Tal. Ambegaon, Dist.Pune

### **F) Citation Index**

<b>Index</b>	<b>Google Scholar</b>
<b>Citations</b>	<b>43</b>
<b>h-index</b>	<b>4</b>
<b>i10-index</b>	<b>2</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	Basic Training Program in Nano Science and Technology	Indian Institute of Science, Bangalore	13 <sup>th</sup> to 15 <sup>th</sup> March 2023
2	FDP on Recent Advancement in Smart Materials for Sustainable Energy Applications	Sathyabama Institute of Science and Technology, Chennai	20 <sup>th</sup> to 25 <sup>th</sup> November 2023

### **❖ Resource person in Conference/Seminar/Workshop/Any other programs: (2018 2023)**

<b>Sr. No.</b>	<b>Title of the Event</b>	<b>Level (Int/Natl/Stat/Uni)</b>	<b>Organizer</b>	<b>Date</b>
1.	Three Days on Training Workshop on 'Fabrication and Characterization of Materials	National	Department of Physics, Y. C. I. S. Satara	24-26 April 2023

2.	Five Days on Training Workshop on 'Fabrication and Characterization of Materials	National	Department of Physics, Y. C. I. S. Satara	10-14 June 2024
3.	One Day Workshop on Research Methodology	Local	Department of Forensic Science, Y. C. I. S. Satara	03 August 2024

**Signature of Faculty**