CURRICULUM VITAE

Dr. Anamika Vitthal Kadam ASSOCIATE PROFESSOR,

Department of Physics,

The Institute of Science,

Dr. Homi Bhabha State University,

15, Madam Cama Road,

Fort, Mumbai-400032,

M.S., INDIA

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Education Ph. D. in Physics, Materials Science. BhartiVidyapeeth University,

Pune- 411038

M.S., INDIA

Title of thesis:

"Electrochromic properties of nickel oxide-conjugated polymers (PPY, PANI) thin films" defended viva voce on 17th March 2010.

Supervisor – Dr. Pramod S. Patil Thin Film Materials Laboratory, Department of Physics, Shivaji University, Kolhapur 416004 MS India

M. Sc. in Physics, 2001

Mumbai University, Department of Physics, Institute of Science, Fort, Mumbai, M.S. India With 60.7 % (ranked first in the specialization)

Specialization – Solid-State Electronics

B. Sc. in Physics (Three-year degree course), 1999

Mumbai University, MS India

Courses are taken during the research work

- 1. Research methodologies
- 2. Recent Advances in Solid State and Materials Physics
- 3. Characterization of Materials (XRD, SEM, HRTEM, AFM, UV-VIS-IR, Optical property measurements, EIS analysis, XPS)
- 4. Science and Technology of Thin Films
- 5. Electrochromism in thin oxide films

Courses are taken during the teaching work

- 1. Solid State Physics
- 2. Solid-State Electronics
- 3. Optics
- 4. Crystallography
- 5. Nanotechnology
- 6. Thin Films and its Properties
- 7. Semiconductor Technology
- 8. Characterization Techniques
- 9. Condensed Matter Physics
- 10. Atomic and molecular physics

RESEARCH EXPERIENCE

- The recognized guide under Dr. Homi Bhabha State University, The Institute of Science, Fort, Mumbai.
- Six (06) students are registered for Ph.D. , 34 students completed their master's project under my guidance
- Three students completed 6 months Research Internship
- Five years of research experience in thin films and materials synthesis and characterization under the guidance of Dr. P.S.Patil, Reader, Shivaji University, Kolhapur, M.S.India.
- January 2015, received guideship of D.Y. Patil University, Kolhapur under the faculty of interdisciplinary research in Medical Physics.
- Received projects viz. from DST-SERB, New Delhi, Marathwada University, Aurangabad & Shivaji University, Kolhapur
- Developed a research lab in our college/institute under the project grant of DST-SERB.

Teaching Experience

Institute	Year	Subject	Designation
Viva College of Science,	2001-2005	B.Sc. Physics	Lecturer and HOD of
Virar,Mumbai			department
D.Y.Patil college of	2005-2008	Engineering	Lecturer in Physics
Engineering, Kolhapur		Physics and	
		Electronics	
Vivekanand College of	2008-2010	B.Sc. Physics	Lecturer
Science			
D.Y.Patil college of	2010-31/01/2019	Engineering	Assistant Professor
Engineering, Kolhapur		Physics	of Physics and HOD
Government Institute of	01/02/2019 -	B.Sc. and M.Sc.	Associate Professor
Forensic Science,	31/08/2019	Forensic Physics	of Physics and HOD
Aurangabad			
The Institute of Science, Dr.	01/09/2019 - till	M.Sc. Physics,	Associate Professor
Homi Bhabha State	date	Solid state	of Physics
University, Madam Cama		Physics, Solid	
Road, Fort, Mumbai		state electronics	

LECTURES DELIVERED

- 1) Delivered lectures of medical physics to M.Sc. students
- 2) Delivered lectures of Engineering Physics to Engineering students.
- 3) Delivered lectures of Applied Physics to Polytechnic students.
- 4) Delivered lectures of Pure Physics to B.Sc. Degree and M.Sc. Postgraduate students.
- 5) Delivered lectures of Research Methodology to Ph.D. Students.
- 6) Delivered lectures for NET/SET appearing students

Publication Details: (Citations: 661, h-index-11, i10-index-13)

A) Published Papers in Reffered journals:

1. Porous Crosslinked Co3O4 Nanoflakes Synthesized at different pH Media for Electrochemically Charge Storage Applications, Sharad L Jadhav, Amar L Jadhav, Anamika V Kadam, Electrochimica Acta, 2022 (426)140845. https://doi.org/10.1016/j.electacta.2022.140845

- An overview of patents and recent development in flexible supercapacitors, A Khorate, AV Kadam, Journal of Energy Storage, Volume 52, Part A, 1 August 2022, 104887, DOI: https://doi.org/10.1016/j.est.2022.104887
- 3. Effect of different metals doped in nickel oxide nanomaterials on electrochemical capacitive performance, **Anamika V Kadam** Amar L Jadhav, Sharad L Jadhav, IntechOpen, 16/08/2021, DOI: 10.5772/intechopen.99326
- 4. Relativistic Theory to Compton Effect for Spectroscopic Detector, N Jadhav, G Mota, A Mishra, D Gupta, **A Kadam** Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Volume 1032, 1 June 2022, 166656. https://doi.org/10.1016/j.nima.2022.166656
- 5. Effect of Different Ph Media of Interconnected Nanoflakes Co3o4 Synthesized by Cathodic Electrodeposition for Supercapacitor Application, Mr Sharad and L, Mr Amar and Kadam, Anamika, Effect of Different Ph Media of Interconnected Nanoflakes Co3o4 Synthesized by Cathodic Electrodeposition for Supercapacitor Application. Available at SSRN: https://ssrn.com/abstract=4070656 or http://dx.doi.org/10.2139/ssrn.4070656
- 6. Hydrogen production using water splitting method with molybdenum dioxide: Short Review, Anamika V. Kadam Suchitra Sapakal, international journal of advanced and innovative research, ISSN 2394-7780, Volume 8, Issue 4, Pages 113-118
- Synthesis of Nickel Oxide Nano Material by Electrodeposition for Electrochemical Capacitive Analysis, A.V. Kadam A.L. Jadhav, S.L. Jadhav, V.S. Jamdade, K.R. Kharat, A.A. Deshmane, AIJR Publisher in the "Proceedings of National Conference on Relevance of Engineering and Science for Environment and Society" (R{ES}2 2021), , 333- 339, 10.21467/proceedings.118
- Effect of Cd2+ Substituted Nickel Ferrite oxide (Ni1-xCdxFe2O4) on Magnetic, Dielectric and Structural Properties, K.R. Kharat, S.L. Jadhav, A.L. Jadhav, A.V. Kadam, J.L. Bhosale, T.S. Magdum, AIJR Publisher in the "Proceedings of National Conference on Relevance of Engineering and Science for Environment and Society" (R{ES}2 2021), , 320-332, DOI: https://doi.org/10.21467/proceedings.118.57
- Controlled Synthesis of Cobalt Oxide Electrode by Electrodeposition for Supercapacitor Application, S.L. Jadhav, A.L. Jadhav, V.S. Jamdade, K.R. Kharat, A.A. Deshmane, A.V. Kadam, AIJR Publisher in the "Proceedings of National Conference on Relevance of Engineering and Science for Environment and Society" (R{ES}2 2021), 313-319 DOI: https://doi.org/10.21467/proceedings.118.56
- Studies on optical, structure and photoconductivity of titanium dioxide thin films prepared by chemical bath deposition via aqueous route, V.M. Bhuse Amit Kamble, A. Ubale, A. L. Jadhav, S.L. Jadhav, A.V. Kadam, C. Kanamadi, Macromolecular Symposia, Volume 400, Issue 1 2100020, 22 December 2021, https://doi.org/10.1002/masy.202100020
- Sarthak Hajirnis, Prachi Chavan, Vaibhav Manapure, Akshay Patil, Ayesha Khan, B. Nadekar, P.S. More, A.V. Kadam, Hydrothermal synthesis of WO3 film on rough surface to analyze methanol gas at room temperature, Materials Research Express, 8(9), 095503, 2021. <u>https://doi.org/10.1088/2053-1591/ac1bcc</u>
- 12. **A.V. Kadam**, N Y Bhosale, A. Khan, Sawanta S. Mali, Chang K. Hong, Reduced graphene oxide layered WO3 thin film with enhanced electrochromic properties, Journal of Colloid

and interface science, Elsevier, Volume 571, 1 July 2020, Pages 185-193. https://doi.org/10.1016/j.jcis.2020.03.029

- 13. Anamika V Kadam, Electrochromic properties of ITO/WO3/LiClO4-PC-PMMA-ACN/NiO/ITO framework, Materials Today: Proceedings 23P2 (2020) pp. 354-360. https://doi.org/10.1016/j.matpr.2020.02.053
- 14. A.V. Kadam, N Y Bhosale, Sawanta S. Mali, Chang K. Hong, Fabrication of an electrochromic device by using WO₃ films synthesized using facile single-step hydrothermal process, Thin solid films, 673 (2019) 87-93. <u>https://doi.org/10.1016/j.tsf.2019.01.009</u>
- A.V. Kadam, S.B. Patil, Polyaniline globules as a catalyst for WO₃ nanoparticles for supercapacitor application, Materials research express, 5(8), 2018, 085036. <u>https://doi.org/10.1088/2053-1591/aad406</u>
- 16. N Y Bhosale, Sawanta S. Mali, Chang K. Hong, Anamika V. Kadam," Hydrothermal synthesis of WO₃ nanoflowers on etched ITO and their electrochromic properties", Electrochimica Acta, 246 (2017) 1112–1120. https://doi.org/10.1016/j.electacta.2017.06.142
- 17. **AV Kadam**, "Propylene glycol-assisted seed layer-free hydrothermal synthesis of nanostructured WO₃ thin films for electrochromic applications", Journal of Applied Electrochemistry, 47(2017) 335-342. <u>https://doi.org/10.1007/s10800-016-1011-8</u>
- 18. NY Bhosale, **AV Kadam**, Effect of etching on current and optical density for WO₃ thin film, International J of engg, research and technology, 10(1), 573-577, 2017
- 19. NY Bhosale, **AV Kadam**, "Superior Electrochromic Performance of Tungsten Oxide Embedded with Polypyrrole", IJIRST –International Journal for Innovative Research in Science & Technology, Volume 3, Issue 04, September 2016.
- Digambar K. Gaikwad, Sawanta S. Mali, Chang K. Hong, Anamika V. Kadam, "Influence of disordered morphology on electrochromic stability of WO3/PPy", Journal of Alloys and Compounds 669 (2016) 240-245. <u>https://doi.org/10.1016/j.jallcom.2016.01.226</u>
- P Kemble, R Mane, D Salokhe, P Mane, S Davare, AV Kadam, An iPhone application for car showroom with deployment of Beacon, International research J of engg and technology, 3(4), 433-436, 2016
- 22. NY Bhosale, **AV Kadam**, optimized thermal treatment for hydrothermally grown stabilized nanostructured WO₃ thin films in electrochromic applications, Proceeding of international conference on advances in material science, 1 (2016) 69-71.
- 23. AI Inamdar, AC Sonavane, SM Pawar, YoungSam Kim, JH Kim, PS Patil, Woong Jung, HyunsikIm, Dae-Young Kim, Hyungsang Kim, "Electrochromic and electrochemical properties of amorphous porous nickel hydroxide thin films", Applied Surface Science, 257(2011)9606-9611. <u>https://doi.org/10.1016/j.apsusc.2011.06.079</u>
- 24. AC Sonavane, AI Inamdar, DS Dalavi, HP Deshmukh, PS Patil, "Simple and rapid synthesis of NiO/PPy thin films with improved electrochromic performance", ElectrochimicaActa 55 (2010) 2344–2351. <u>https://doi.org/10.1016/j.electacta.2009.11.087</u>
- 25. AC Sonavane, AI Inamdar, PS Shinde, HP Deshmukh, RS Patil, PS Patil, "Efficient electrochromic nickel oxide thin films by electrodeposition", Journal of Alloys and Compounds 489 (2010) 667–673. <u>https://doi.org/10.1016/j.jallcom.2009.09.146</u>

- 26. AC Sonavane, AI Inamdar, HP Deshmukh, PS Patil, "Multicoloured electrochromic thin films of NiO/PANI", J. Phys. D: Appl. Phys. 43 (2010) 315102 (8pp). https://doi.org/10.1088/0022-3727/43/31/315102
- AI Inamdar, AC Sonavane, SK Sharma, HyunsikIm, PS Patil, "Nanocrystalline zinc oxide thin films by novel double pulse single step electrodeposition", Journal of Alloys and Compounds, Volume 495, Issue 1, 9 April 2010, 76-81. https://doi.org/10.1016/j.jallcom.2010.01.090
- 28. AI Inamdar, SH Mujawar, SB Sadale, AC Sonavane, MB Shelar, PS Shinde, PS Patil, "Electrodeposited zinc oxide thin films: Nucleation and growth mechanism", Solar Energy Materials & Solar Cells 91 (2007) 864–870. <u>https://doi.org/10.1016/j.solmat.2007.01.018</u>
- 29. MM Uplane, SH Mujawar, AI Inamdar, PS Shinde, AC Sonavane, PS Patil, "Structural, optical and electrochromic properties of nickel oxide thin films grown from electrodeposited nickel sulphide", Applied Surface Science,253(2007)9365-9371. https://doi.org/10.1016/j.apsusc.2007.05.069
- 30. A.V. Kadam A.A. Kulkarni, S.S.Tupe, Development of Electrochromic Device Based on Electrodeposition and Chemical Bath Deposition for Nickel Oxide Thin Films Doped with Efficient Multichromatic Polymers, International Journal of Latest Trends in Engineering and Technology (IJLTET), 2 (2013) 258-264

B) Publications with peer review process:

- 1. Amar Laxman Jadhav, Sharad Laxman Jadhav and **Anamika Vitthal Kadam**, Effect of Different Metals Doped in Nickel Oxide Nanomaterials on Electrochemical Capacitive Performance, February 2021. DOI: 10.5772/intechopen.99326
- 2. **A.V. Kadam,** Hydrothermally grown WO3 thin films as a NO2 gas sensor, National Conference on "Materials and their applications: A broad perspective" organised by dept of physics, VPM's B.N. Bandodkar College of Science, Thane, 9-10 January, 2020
- A.V. Kadam, Electrochromic Properties of ITO/WO3/LiClO4-PC-PMMA-ACN/NiO/ITO framework, International Conference on Materials and Engineering Sciences (ICMES-2018), 2018
- 4. **A.V. Kadam**, Hydrothermally grown nanoflowered WO3 thin films on etched ITO for electrochromic studies,J Mat. Sci. 2017, 5:7, 14th International Conference and exhibition on Materials Science and Engineering (doi: 10.4172/2321-6212-C1-011)
- N.Y. Bhosale, A. V. Kadam, Optimised Thermal Treatment For Hydrothermally Grown Stabilized Nanostructred WO3 Thin Film in Electrochromic Application, International conference on advances in materials science (ICAMS-2016), 2016
- 6. D.K. Gaikwad, **A.V. Kadam**, Post-deposition annealing effect on morphology and electrochromic properties of tungsten oxide thin films,
- S. B. Shikalgar, N. A. Sonune, M. M. Kshirsagar, P. A. Khandekar, D. K. Gaikwad, A. V. Kadam, Effect of electrolytes on electrochromic tungsten oxide thin films, International Conference on Emerging trends in basic and applied sciences (ETBAS 2015), 2015

- D.K. Gaikwad, A.V. Kadam, Hydrothermal synthesis of tungsten oxide nanorods and nanobricks, Science Park Research Journal, ISSN: 2321-8045, 29-30 January 2015 (Poster presentation received 2nd Prize).
- D.K. Gaikwad, A.V. Kadam, Synthesis of uniform WO₃nanobricks via Hydrothermal Process using Ammonium Sulphate, Proceedings of 5th national conference on emerging trends in engineering, technology, and architecture, ISBN 978-81-920561-6-6, 24th January 2015.
- 10. **A.V. Kadam**, Hydrothermal synthesis of tungsten oxide nanorods, conference proceeding (ISBN 978-81-928717-2-1), International Conference on Advanced and Applied Material Science (ICAAMS-2014), 15th -16th, January 2014.
- 11. A.A. Kulkarni, **A.V. Kadam**, Improved divergence of LASER beam using nanostructured NiO thin films, Proceedings of national conference on emerging trends in engineering, technology, and architecture, (NCETETA 2014), 25thJanuary 2014.
- A.V. Kadam, Development of Electrochromic device for nickel oxide thin films doped with efficient multichromatic polymers, A.V. Kadam, page 289, ISBN 978-81-920561-2-8, Proceedings of national conference on emerging trends in engineering, technology, and architecture, (NCETETA 2013), 29th January 2013 (Oral presentation received 1st Prize).
- A.V. Kadam, Simple and rapid synthesis of NiO/PPY thin films, page 618, ISBN 978-81-920561-2-8, Proceedings of national conference on emerging trends in engineering, technology, and architecture, (NCETETA 2012), 28-29th January 2012 (Oral presentation received 1st Prize).
- 14. H. P. Deshmukh. A. С. Sonavane, A. I.Inamdar, P. S. Patil. films", 12^{th} "MulticoloredElectrochromicNiO/PANI IUMRS-ICA-2011, thin International Conference in Asia, 19-22nd Sept 2011.
- 15. A C Sonawane, D S Dalavi, H P Deshmukh, P M Kadam, P. S. Patil, "Multicoloured chromogenic coatings of organoinorganic materials", National seminar on Preparation of nanomaterials and their applications, Feb 20-22, 2010
- A.C. Sonavane, "Multicolored EC thin films of NiO/PANI for ECD applications", Commercialization of Renewable Energy Technology, Oct.21-23; 2009.(Oral presentation received 3rd Prize)
- 17. D S Dalavi, D S Patil, R S Patil, P R Jadhav, **A C Sonawane**, P. S. Patil, "Synthesis and characterization of Prussian blue/PPy composite thin films for smart windows", International workshop on Nanotechnology and Advanced Functional Materials, NCL,Pune, July 9-11,2009.
- 18. A.C. Sonavane, A.I. Inamdar, H.P. Deshmukh, R.S. Patil, P. S. Patil, "Elctrochromic performance of nickel oxide /polyaniline composite films", International Conference on Nanomaterials for Advanced Applications (ICNAMA-2008).
- A.C.Sonavane, H.P.Deshumukh, A.I.Inamdar, S.H. Mujawar, P. S. Patil, "Anodic Electrochromism in Electrodeposited Nickel Oxide Thin Films via Aqueous Chloride Route", International Conference on Advanced Materials and Applications15-17 Nov.2007

- 20. M.M.Upalane S.H. Mujawar, A.I. Inamdar, A.C. Sonavane, P.S. Patil, "Electrochromism in ElectrosysthesizedNiO Thin Films", National Seminar on New horizons in Physics-20-22 Jan 2007
- M.M.Uplane, S.H.Mujawar, A.I.Inamdar, A.C.Sonavane, P. S. Patil, "Structural, Optical and Electrochromic properties of Nickel Oxide thin Films", Materials for Energy Generation, Conversion and Storage, MRSI,12-14 Feb.2007.
- 22. A.I.Inamdar, S.H.Mujawar, A.C.Sonavane, S.P.Shinde, M.B.Shelar, P. S. Patil, "Growth Mechanism and Properties of Electrodeposited Zinc Oxide Thin Films", National Seminar on Materials for Advanced Technologies (NASMAT-2006)

C) Publications without peer review process:

- S. B. Shikalgar, N. A. Sonune, M. M. Kshirsagar, P. A. Khandekar, D. K. Gaikwad, A. V. Kadam "Effect of electrolytes on electrochromicbehavior of WO₃ thin films", Presented a poster at International Conference on "Emerging Trends In Basic and Applied Sciences (ETBAS 2015)" Organized by "Karmaveer Hire Arts, Science, Commerce, and Education College, Gargoti
- 2. D. K. Gaikwad, A. V. Kadam, Easy synthesis of hybrid tungsten oxide/polypyrrolenanocomposite thin films, national conference on emerging trends in engineering, technology and architecture, 2016
- 3. A.C. Sonavane, "Multicoloredelectrochromic thin films of NiO/PANI", (Oral Presentation), Advances in Synthetic Methodologies and New Materials, Jan 21-22,2011
- D.K. Gaikwad, A.V. Kadam, Hydrothermal synthesis of tungsten oxide nanorods and nanobricks, UGC sponsored national conference on Material synthesis for device level applications (MSDLA-2015),29-30 January 2015 (Poster presentation received 2nd Prize).

Sr.	Title with page	Type of	Publisher & ISSN/ISBN	Wheather	
No.	nos.	Book	No.	peer	Author's Name
				reviewed	
1.	Electrochromic	Book	LAP LAMBERT	Peer	
	Properties of		Academic Publishing &	reviewed	Anamika Kadam,
	Nickel Oxide-		ISBN-10:6200315809,		Pramod Patil, HP
	Polymer		ISBN-13:978-		Deshmukh
	(PPY,PANI)		6200315809		
	thin film				
2.	Effect of	IntechOpen	February 2021,	Peer	
	Different	Book	DOI:	reviewed	Amar Laxman
	Metals Doped	Chapter	10.5772/intechopen.99326		Jadhav, Sharad
	in Nickel Oxide	-	Ĩ		Laxman Jadhav and
	Nanomaterials				Anamika Vitthal
					Kadam

D) Subject Books/Chapters published by Intenational/State level with ISBN/ ISSN/DOI No.

	on Electrochemical Capacitive Performance					
3.	Engineering Physics	Text Book	Pearson ISBN: 978-81- 317-6393-3	Peer reviewed	Dr. A.V. Kadam, NityanandChoudhary	
4.	Engineering Physics	Text Book	Techmax ISBN:978-93- 5077-350-5	Peer reviewed	Dr. M.P. Ghatule, Dr. Mrs. Anamika V. Kadam	

Research Projects:

Sr. No.	Title	Agency	Wheather PI/Co-PI	Grant/Amount Mobilized (Rs. Lakh)	Year of operation
1.	Hydrothermally grown nanostructured tungsten oxide thin film for smart window	Science and Engineering Research Board (SERB)	PI	Rs. 21.55 Lakh	2014- 2017
2.	Electrodeposition of stable nanostructured tungsten oxide (WO3) electrochromic films	Shivaji University, Kolhapur	PI	Rs. 25,000/-	2014- 2015
3.	Minimization of cell phone radiations on cancer, heart attack risk	Sakal India Foundation	PI	Rs. 40,000/-	2018-19
4.	Reduced grapheme oxide layered WO3 thin film with enhanced electrochromic properties	Shivaji University, Kolhapur	PI	Rs. 20,000/-	2018-19
5.	Shielding of cell phone radiations on cancer	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	PI	Rs. 40,000/-	2019-20
6.	Activity of Molybdenum Dioxide embedded cobalt and Iron oxide nanostructures for Hydrogen and Oxygen Evolution using Photo-Electrolysis for Water Splitting	SERB-Science and Engineering Research Board, New Delhi	PI	Rs. 20,17,224/-	2022- 2025

Honours/Awards:

 Invited Talk on "Shaping future with Nanoscience and Technology" on 8th January 2020 in KarmaveerBhaurao Patil College, Vashi, Navi Mumbai

- 2. Guided on the newly adopted Choice Based Credit System (CBCS) syllabus of Engineering Physics in the workshop conducted at Dr. J.J. Magdum College of Engineering, Jaysingpur on 21.09.2018.
- Worked as a Local Organizer and co-ordinator for faculty development program (FDP) on student induction program sponsored by AICTE (WRO-Mumbai) at D.Y. Patil College of Engineering and Technology, Kolhapur during 19th to 25th July 2018.
- 4. Worked as a **speaker and moderator** in an international conference and exhibition on material science and engineering in Las Vegas, USA during 13-15 November 2017.
- 5. Received Oka Research Fellowship from Sakal India Foundation during 2018-19
- 6. Young Scientist Fellowship-DST SERB-2014-2017
- 7. Received 1st Prize in paper presentation of national conference on emerging trends in engineering, technology, and architecture-2012
- 8. Received 1st Prize in paper presentation of national conference on emerging trends in engineering, technology, and architecture-2013
- 9. Received 3rd prize in paper presentation of CRET 2009
- 10. Received 2nd prize in poster presentation of MSDLA-2015.

TECHNICAL SKILLS

THIN FILM DEPOSITION TECHNIQUES

Electrodeposition, Spray Pyrolysis, Vacuum Deposition, Chemical Bath Deposition, hydrothermal method etc. techniques are utilized in practice.

CHARACTERIZATION TECHNIQUES KNOWN

- Very good experience of handling Scanning Electron Microscope (SEM).
- Very good experience for the handling AMBIOS make **XP-1Surface Profiler** in the department of Physics Shivaji University, Kolhapur.
- Electrochromic characterizations using Cyclic Voltammetry (CV), Chronocoulometry (CC), Chronoamperometry (CA) with in-situ measurements of transmittance.
- Electrochemical Impedance Spectroscopy (EIS) with distribution of relaxation time (DRT) analysis
- Galvanostatic charge discharge (GCD)
- Quartz Crystal Microbalance (EQCM)
- Optical Microscope
- DC electrical resistivity (300 K-10K) (linear four probe and Van der pauw geometry).
- High Temperature Programmable Furnace

• Spectrophotometer UV-VIS-IR.

COMPUTER PROFICIENCY

- Completed Maharashtra State Certificate in Info Tech (MS-CIT) course in 2019 with score of 84
- A course in "C" Programming at degree level
- Secured rank first in Computer Literacy course at School level.

Others

- 1. Worked as a Program Organizer and coordinator to arrange 7 days faculty development program (FDP) sponsored by AICTE, WRO-Mumbai
- 2. Worked as a reviewer for various international papers of Elsevier and Springer
- 3. Worked as a reviewer for projects of Science and Engineering Research Board (SERB), New Delhi
- 4. Worked as a Dean R & D of D.Y. Patil College of Engg. & Tech., Kolhapur
- 5. Worked as a member of NAAC committee of D.Y. Patil College of Engg. & Tech., Kolhapur
- 6. Worked as a member of NBA committee of D.Y. Patil College of Engg. & Tech., Kolhapur
- 7. Worked as a coordinator of R & D of D.Y. Patil College of Engg. & Tech., Kolhapur
- 8. Worked as a member of organizing committee for National & International Conference
- 9. Worked as a paper setter, moderator and assessor in the subject of Physics
- 10. Worked as a member of BOS
- 11. Worked as a member of College Development Committee (CDC)
- 12. Worked in syllabus revision committee of Shivaji University
- 13. Worked as a coordinator of Interdisciplinary research
- 14. Worked as a coordinator and member of admission committee from July, 2015 to Jan, 2019 in D.Y. Patil College of Engg. & Tech., Kolhapur
- 15. Worked as a member of BOS committee in The Institute of Science, Mumbai
- 16. Working as a IQAC member in The Institute of Science, Mumbai
- 17. Handling NAAC criteria 1 in The Institute of Science, Mumbai

Membership

- 1. Life membership of Indian Society for Technical Education (ISTE)
- 2. Life membership of Nano and molecular society (NMS)

Particulars of other activities:

- 1. Completed Maharashtra State Certificate in Information Technology (MS-CIT) course with 84/100 marks
- 2. Completed Shorthand Course of 80 w.p.m. and Typing of 40 w.p.m.
- 3. Secured prizes in paper presentations in various conferences.

Present Research Areas:

Electrochromism, Photoelectrochromism, Supercapacitor, Solar Cell, Gas Sensor, Conductive ink, Water splitting properties, Fuel cell, Nanotechnology, material science.

Dr. Anamika V. Kadam