

Dr. Archana Raviraja Patil

M. Sc., B. Ed., Ph. D., SET, GATE.

Address for correspondence

2748 B Ward, Mandalik Galli

Mangalwar Peth, Kolhapur.

Pin-416012

(M.S.) India



PERMANENT ADDRESS

2748 B Ward, Mandalik Galli,
Mangalwar Peth, Kolhapur. Pin-
416012(M.S.) India

PERSONAL DETAILS

Birth Date : 28th July 1986
Sex: Female
Cast: Open (Hindu-Maratha)
Nationality : Indian
Marital Status : Married

Academic Details:

1. Ph.D. in Physics (July-2019)

At Department of Physics, Shivaji University, Kolhapur, Pin:416004 (M.S.) India

Thesis title- “Copper oxide Based Thin films For Electrochemical **Biosensor.**”

2.MH-SET (2016)

Conducted by Savitribai Phule University Pune.

3.GATE (2014)

Conducted jointly by IISc and seven IIT's on behalf of the National Co-ordination board-GATE, Department of Higher Education, Ministry of Human Resource Development (MHRD), Government of India.

4. B. Ed. (2012)

From B. G. Kharade College of Education, Kolhapur, Pin:416012 (M.S.) India

5. M.Sc. in Physics (April-2010)

From Department of Physics, Shivaji University, Kolhapur, Pin:416004 (M.S.) India

Specialization: Solid State Physics

6. B.Sc. in Physics (March-2008)

From The New College, Kolhapur (M.S.) India. Affiliated to Shivaji University, Kolhapur, Pin: 416012 (M.S.) India.

7. H.S.C. (February-2004)

From Shree Ram Jr. College Kuditre, Tal: Karaveer, Dist: Kolhapur, Pin: 416204 (M.S.) India.

8. S.S.C. (March-2003)

From Shree Ram Highschool and bhagshala Koparde, Tal: Karaveer, Dist: Kolhapur, Pin: 416204 (M.S.) India.

Academic Record:

Sr. No.	Course Name	Board/Unive rsity	Subject	% of marks	Class	Year of passing
1.	Ph.D.	Shivaji University, Kolhapur	Physics	-	-	2019
2.	SET	Pune University	Physics	-	-	2016
3.	GATE	-	Physics	AIR 709		2014
4.	B. Ed.	Shivaji University, Kolhapur	Science & Maths	69.83	First Class	2012
4.	M.Sc.	Shivaji University, Kolhapur	Physics	71.20	Distinction	2010
5.	B.Sc.	Shivaji University, Kolhapur	Physics	65.16	First class	2008
6.	H. S. C.	MSBSHSE, Pune	Science	74.17	First class	2004
7.	S. S. C.	MSBSHSE, Pune	-	80.53	Distinction	2002

Teaching Experience:

- a. Worked as “Assistant Professor” at Rajarshi Chhatrapati Shahu College, Kolhapur from **20/06/2016 to 26/02/2020 (C.H.B.)**
- b. Worked as “Assistant Professor” at Rajarshi Chhatrapati Shahu College, Kolhapur from **27/02/2020 to till date.**

TECHNICAL SKILLS:**Synthesis technique**

1. Synthesis of thin films by Chemical bath deposition technique (CBD), Hydrothermal, Successive ionic layer adsorption and reaction (SILAR) technique, electrodeposition technique.
2. Synthesis of polymer composite materials by CBD, SILAR and electrodeposition technique.

Equipment, Plants and Machinery Handled

- a. High temperature programmable furnace
- b. Electrochemical work station

c. UV-Visible Spectrophotometer

Computer Proficiency

a. Operating systems Windows 7/8/8.1/10

b. MS-Office 2007/2013/2016

c. Origin 8.5/2013

Awards:

a. "Aadarsh Vidyarthini" award by B. G. Kharade College of Education, Kolhapur for the year 2011-2012.

b. 1st prize in "Vakrutv-Utsfurt" com

Research Activity:

List of articles published in Journal Publications

[1] **A. S. Patil**, G. M. Lohar, Vijay J. Fulari, "Structural, morphological, optical and photoelectrochemical cell properties of copper oxide using modified SILAR method", Journal of Materials Science: Materials in Electronics, 27 (2016), 9550-9557. **IF:2.195**

[2] **A. S. Patil**, M. D. Patil, G. M. Lohar, Vijay J. Fulari, "Supercapacitive properties of CuO thin films using modified SILAR method", Ionics 23 (2017), 1259-1266. **IF:2.289**

[3] B. P. Relekar, S. A. Mahadik, S. T. Jadhav, **A. S. Patil**, R. R. Koli, G. M. Lohar, V. J. Fulari, "Effect of Electrodeposition Potential on Surface Free Energy and Supercapacitance of MnO₂ Thin Films", Journal of Electronic Materials 47 (2018), 2731-2738. **IF:1.676**

[4] **A. S. Patil**, R. T. Patil, G. M. Lohar, Vijay J. Fulari "Facile synthesis of CuO nanostructures for non-enzymatic glucose sensor by modified SILAR method", Journal of Applied Physics A, 127, (2021) 101-111. **IF:1.810.**

[5] D. P. Mali, R.T. Patil, **A. S. Patil**, V. J. Fulari, "Facile synthesis of NiO nanoflakes via hydrothermal route: Effect of urea concentration", Chemical Physics Letters, 770, (2021) 138-431. **IF: 2.029.**

[6] **A. S. Patil**, R. T. Patil, G. M. Lohar, Vijay J. Fulari, "Chemically synthesized CuO nanostructures for non-enzymatic glucose sensor: effect of deposition time", J Mater Sci: Mater Electron, 32, (2021) 8819-8828 **IF: 2.220.**

[7] **A. S. Patil**, R. T. Patil, Vijay J. Fulari, "Surfactant Assisted Synthesis of CuO Nanostructures for Nonenzymatic Glucose Sensor", Materials Today: Proceedings, 46(4), (2021) 2340-2346. **IF: 0.97.**

Papers/ Posters/ Workshop presented/accepted in International Conferences / Symposia:

[1] Presented poster-

A. S. Patil, G. M. Lohar, H. D. Dhaygude, B. P. Relekar, V. J. Fulari “Synthesis and Characterization of Copper Oxide Thin Films using the SILAR Method” ICMSIRSA-2016, Department of Physics, Shivaji University, Kolhapur.

[2] Presented a poster-

A. S. Patil, R. T. Patil, G. M. Lohar, V. J. Fulari, “Chemically synthesized copper oxide nanostructures for non-enzymatic glucose sensor”, 4th ICPM-MDF-2019, Department of Physics, Shivaji University, Kolhapur.

[3] Presented Paper-

A. S. Patil, R. T. Patil, Vijay J. Fulari, “Surfactant Assisted Synthesis of CuO Nanostructures for Nonenzymatic Glucose Sensor”, International Conference on Multifunctional Nanomaterials (ICMN 2020), Manipal University, Jaipur (28th-30th Dec. 2020)

[4] Participation-

A. S. Patil, worked as a member of organizing committee in five day “Rayat Inspire Camp” organized by Rajarshi Chhatrapati Shahu College, Kolhapur, (26th to 30th Dec. 2016).

[5] Participation-

A. S. Patil, R. T. Patil, G. M. Lohar, V. J. Fulari, “Chemically synthesized copper oxide nanostructures for non-enzymatic glucose sensor”, 4th ICPM-MDF-2019, Department of Physics, Shivaji University, Kolhapur.

[6] Participation-

A. S. Patil, 3rd International conference on Innovative research in science and technology-2017 organized by Gopal Krishna Gokhale College, Kolhapur, (7th & 8th Nov. 2017)

[7] Participation-

A. S. Patil, International conference on nanotechnology addressing the convergence of material science, biotechnology and medical science-2017, organized by D. Y. Patil Education Society, Kolhapur, (9th -11th Nov. 2017)

[8] Participation-

A. S. Patil, International Conference on Multifunctional and Hybrid Materials for Energy And Environment (MHMME-2020), organized by Department of Physics and Astrophysics, YCIS, Satara, 29th -31th Jan 2020.

[9] Participation-

A. S. Patil, Fifth International Conference on Advances in Materials Science (ICAMS - 2020) (e-conference) organized by, Post graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jat, 06th – 07th June 2020.

[10] Participation-

A. S. Patil, One Day National e-Conference on "Emerging Trends in Physical Sciences.(e-conference), organized by Department of Physics Arts, Science and Commerce College, Burli, Ramanadnagar, 22th July 2020.

[11] Participation-

A. S. Patil, "Lead College One Day Seminar in Physics" organized by Rajarshi Chhatrapati Shahu College Kolhapur, (19th Jan. 2017).

[12] Participation-

A. S. Patil, worked as a local organizing committee member for 4th ICPM-MDF-2019, Department of Physics, Shivaji University, Kolhapur, (10th & 11th Jan. 2019).

[13] Participation-

A. S. Patil, State level workshop on "New Horizon-Joy of Learning Physics" organized by Sanjay Ghodawat University, (4th Feb. 2019).

[14] Participation-

A. S. Patil, Two day National workshop on "e-content development for Blended Learning" organized by Rajarshi Chhatrapati Shahu College Kolhapur, (5th & 6th March 2019).

[15] Participation-

Day Online Workshop Organised By Department Of Physics "New Changed Syllabus (Cbcs Pattern) Of B.Sc.-III Physics Laboratory Experiments", Balavant College, Vita, 1st Feb. 2020.

[16] Participation-

One Day Online Workshop On "New Changed B. Sc. III CBCS Curriculum Of Physics Paper IX And Paper XII", Department of Physics, R. C. Shahu College, Kolhapur, 3rd Feb. 2020.

[17] Participation-

One Day Online Workshop On Change Syllabus in Physics at B. Sc. III Sem-VI for courses DSC F1& F3, Dattajirao Kadam Arts, Science and Commerce, College, Ichalkaranji, 9th Feb. 2020

[18] Participation-

A. R. Patil, Online Teachers' Training Workshop on "New Changed Syllabus of B.Sc.-III Physics, Dr. Patangrao Kadam Mahavidyalaya, Sangli, 12th Feb. 2020.

[19] Participation-

A. R. Patil, “Online Teachers’ Workshop on New Changed Syllabus of (CBCS) B.Sc. III Physics Paper-X DSE-E2 Quantum Mechanics & Paper-XVI DSE-F4 Energy Studies and Materials Science”D. P. bhosale College, Koregaon, 24th Feb. 2020.

[20] Participation-

A. R. Patil, One day State level workshop on Intellectual Property rights (IPR-2020), R. C. Shahu College, Kolhapur, 8th Feb. 2020

[21] Participation-

A. R. Patil, Ten days free online workshop for teachers, UTA Teachers Academy, Puducherry, India, 21st - 30th April 2020.

[22] Participation-

A. R. Patil, One week faculty orientation workshop on revised Guidelines of NAAC, Y. C. I. S. Satara, 27st April - 2nd May 2020.

[23] Participation-

A. R. Patil, Three day national level Faculty development Programme on “Skill Development for Online Teaching”, Bhawana College, Mumbai, 5th -7th May 2020.

[24] Participation-

A. R. Patil, Two day online national workshop on “Awareness o f Intellectual Property rights”, Shivaji university, Kolhapur, 8th -9th May 2020.

Resource Person:

[1] Delivered guest Lecture on topic “How to prepare for NET/SET/GATE Exams in Physics” at Vivekanad College, Kolhapur, 16th Feb.2021.

[2], Delivered guest Lecture on topic “Carrier opportunities after B. Sc.” at Shahaji College, Kolhapur, 25th Feb.2021.

[3] Delivered guest Lecture on topic “Carrier opportunities after B. Sc.” at Mahavir College, Kolhapur, 29th June 2021.

Orientation Course:

Completed Orientation Course Organised by Teaching Learning Centre of Ramanujan College, Delhi,(4th June -01st July 2020)