RESUME

Personal Information

Name	:	**Dr. Amar Laxman Jadhav**
Designation	:	Assistant Professor
Department	:	Humanities and Science Vidya Prasarak Mandal's College of Engineering/Polytechnic, College Campus, Thane (W)-400601

Educational Qualification

- **Doctor of Philosophy in Physics- July 2024**

  Institute of Science, Dr. Homi Bhabha State University, Mumbai, MH, India
- **Master of Science in Physics – April 2016**

  Punyashlok Ahilyadevi Holkar Solapur University, Solapur, MH, India
- **Bachelor of Science in Physics – April 2014**

  K.B.P. College, Pandharpur (Solapur University, Solapur, MH, India)

Experience

- One year of teaching experience in B.E (UG) **2023 to till date**
- Two years of teaching experience in M.Sc. (PG) **2021 to 2022**
- Two years of teaching experience at Karmayogi Institute of Technology (Polytechnic) College, Shelve, Solapur **2019 to 2021**
- Three years of teaching experience in B.Sc. (UG) **2017 to 2020**

- Research Experience **2017 to till date**
  - JRF, SRF, and Project Associate Research scholar in the Solapur University, Solapur 2017 to 2020
  - JRF and SRF Research Scholar in the Institute of Science, Mumbai 2021 to 2025

Presented papers in conferences

- Synthesis of Nickel Oxide Nano Material by Electrodeposition for Electrochemical Capacitive Analysis; Amar L. Jadhav, S.L. Jadhav, V.S. Jamdade, K.R. Kharat, A.A. Deshmane, A.V. Kadam, National Conference on Relevance of Engineering and Science for Environment, https://books. aijr. org/index. php/press/catalog/book/118.
- Controlled synthesis of cobalt oxide electrode by electrodeposition for supercapacitor application; S.L. Jadhav, Amar L. Jadhav, V.S. Jamdade, K.R. Kharat, A.A. Deshmane,

A.V. Kadam, National Conference on Relevance of Engineering and Science for Environment, https://books.aijr.org/index. php/press/catalog/book/118.

- Time-Dependent Cobalt Oxide Nanomaterials Synthesized Via Cathodic Electrodeposition for Electrochemical Supercapacitor Application; S. L. Jadhav, Amar L. Jadhav, B.K. Mandlekar, V.S. Jamdade, A.V. Kadam, Emerging Trends in Material Science, ISBN-978-93-91143-83-1.

Published papers in journals

- Porous 3D columnar-sphere of NiO nanomaterials synthesized for supercapacitors via hydrothermal route: impact of thiourea concentration; **Amar L. Jadhav,** Sharad L. Jadhav, Bhalchandra K. Mandlekar, Anamika V. Kadam, *Physical Chemistry Chemical Physics*, 25 (36), 24712-24720 (RSC publication, I.F - 3.676)
- Hydrothermally synthesized three-dimensional hierarchical CuO nanomaterials for energy storage applications; **Amar L. Jadhav**, Sharad L. Jadhav, Bhalchandra K. Mandlekar, Anamika V. Kadam, *Materials Chemistry and Physics* 310,128494 (Elsevier publication- I.F.4.6)
- Effects of various molarities of nickel oxide on the aggregate 1D–3D structure and its electrochemical activity; **Amar L. Jadhav**, Sharad L. Jadhav, Bhalchandra K.Mandlekar, Anamika V. Kadam, *Journal of Alloys and Compounds* 925, 166716. (Elsevier publication - I.F.6.37)
- 3D marigold flowers of copper–nickel oxide composite materials as a positive electrode for high-performance hybrid supercapacitors, **Amar L. Jadhav**, Sharad L. Jadhav, Savanta Mali, C.K. Hong, Anamika V. Kadam, *New Journal of Chemistry*, 48 (27), 12275-12287, (RSC publication, I.F - 3.3).
- Porous crosslinked Co_3O_4 nanoflakes synthesized at different pH media for electrochemically charge storage applications; Sharad L. Jadhav, **Amar L. Jadhav**, Anamika V. Kadam, *Electrochimica Acta* 426, 140845. (Elsevier publication- I.F.6.90)
- Effect of Different Metals Doped in Nickel Oxide Nanomaterials on Electrochemical Capacitive Performance Supercapacitors for the Next Generation; **Amar L. Jadhav,** Sharad L. Jadhav, Anamika V. Kadam, *Itech open*, 2021(Chapter publication)
- Influence of deposition current and different electrolytes on charge storage performance of Co_3O_4 electrode material; Sharad L. Jadhav, **Amar L. Jadhav,** Bhalchandra K. Mandlekar, Pradip B. Sarawade, Anamika V. Kadam, *Journal of Physics and Chemistry of Solids* 180, 111422. (Elsevier publication- I.F.3.99)
- Binder-free room-temperature synthesis of amorphous-WO_3 thin film on FTO, ITO, and stainless steel by electrodeposition for electrochromic application; Bhalchandra K. Mandlekar, **Amar L. Jadhav**, Sharad L. Jadhav, Ayesha Khan, Anamika V. Kadam, *Optical Materials* 136, 113460. (Elsevier publication- I.F.3.08)
- Synthesis of Bi-doped titanium oxide by chemical bath deposition for dye synthesized solar cell application; A.A. Kamble, **Amar L. Jadhav**, V.B. Ghanwat, S.L. Jadhav, D.S. Gaikwad, *Inorganic Chemistry Communications* 152, 110681. (Elsevier publication- I.F.3.8)
- Mo-doped porous Co_3O_4 nanoflakes as an electrode with the enhanced capacitive contribution for Asymmetric supercapacitor application; Sharad L. Jadhav, **Amar L. Jadhav**, Pradip B. Sarawade, Bhalchandra K.Mandlekar, Anamika V. Kadam, *Journal of Energy Storage*, 82, (2024), 110540 (Elsevier publication- I.F.9.4).

- Controlled synthesis, structural, morphological and electrochemical study of $Cu(OH)_2$@Cu flexible thin film electrodes prepared via aqueous–non-aqueous routes, T.S. Ghadge, **Amar L. Jadhav**, Y.M. Uplane, A.V. Thakur, S.V. Kamble, B.J.Lokhande, *Journal of Materials Science: Materials in Electronics*, 32, 90189031. (Springer publication- I.F.2.8)
- Cyclic voltammetric study of CuO thin film electrodes prepared by automatic spray pyrolysis, S.V. Kambale, **Amar L. Jadhav**, R.M. Kore, A.V. Thakur, B.J. Lokhande, *Macromolecular Symposia*, 387 (1), 1800213. (Willey publication)
- Synthesis and electrochemical study of ruthenium influenced copper oxide electrodes prepared by self-anodization, T.S. Ghadge, **Amar L. Jadhav**, B.J. Lokhande, *Journal of Alloys and Compounds* 824, 153860. (Elsevier publication - I.F.6.37)
- Capacitive study of nickel oxide thin films prepared by spray pyrolysis, **Amar L. Jadhav**, S.V. Kambale, R.M. Kore, B.J. Lokhande, *International Journal of Fracture and Damage Mechanics* 5 (2), 17-22
- Extraction of excessively reduced graphene oxide from discarded dry cell batteries by anodic exfoliation method, A Khan, **Amar L. Jadhav**, J.M. Khobragade, A.V. Kadam, *Journal of Materials Science: Materials in Electronics*, 34 (1), 62. (Springer publication- I.F.2.8)
- Studies on Optical, Structure, and Photoconductivity of Titanium Dioxide Thin Films Prepared by Chemical Bath Deposition Via Aqueous Route, V.M.Bhuse, Amit A. Kamble, Panchashila A. Ubale, **Amar L. Jadhav**, Sharad L. Jadhav, *macromolecular symposia*, 400 (1), 2100020. (Willey publication)
- Spinel nickel ferrite (NiFe2O4) materials synthesized via spray-pyrolysis for electrochemical supercapacitor application, VD Patil, DA Patil, **Amar L. Jadhav**, SL Jadhav, AV Kadam, SR Dandwate, Discover Electrochemistry 1 (1), 2
- Effect of content ratio of copper cobalt phosphate in supercapacitor application, P Sutar, P Deshmukh, **Amar L. Jadhav**, A Kadam, Sustainable Energy & Fuels, 2025, **https://doi.org/10.1039/D4SE01436G**.

Conference attended

- Second prize Poster Presentation at the National conference on "Smart Material and Manufacturing Trends in Engineering and Applied Science", Thane.
- Poster Presentation at "International Conference on Energy Conversion and Storage 2025" IIT Madras.
- Paper presentation at "One Day National Conference on Physical, Chemical and Biological Strategies, Tools and Ideas for Promising Future", K. N. Bhise Arts, Commerce and Vinayakrao Patil Science College, Vidyanagar, Bhosare, Tal-Madha, Dist- Solapur
- Poster and oral Presentation at "Advanced Nanostructured Materials for Energy Generation, Storage and Smart Applications" Shardabai Pawar Mahila Arts, Commerce and Science College, Shardanagar, Baramati.
- Paper presentation at "Sixth International Conference on Advances in Materials Science (Online)-2021" Raje Ramrao Mahavidyalaya, Jath, Sangali.

Projects/ Research Grants received

- Chhatrapati Shahu Maharaj Research, Training and Human Development Institute (SARTHI), Pune, MH, India, for financial support through a Junior and Senior Research Fellowship (JRF and SRF) under the CSMNRF – 2021/2021-22/896.

Awards and Achievements

- Second prize Poster Presentation at the National conference on "Smart Material and Manufacturing Trends in Engineering and Applied Science", Thane.
- First prize oral presentation at the "Emerging Trends in Material Science conference", Koregaon, Satara.
- Chhatrapati Shahu Maharaj Research, Training and Human Development Institute (SARTHI), Pune, MH, India, for financial support through a Junior Research Fellowship under the CSMNRF – 2021/2021-22/896.

Books/ Chapters published

- Effect of different metals doped in nickel oxide nanomaterials on electrochemical capacitive performance, A.L. Jadhav, S.L. Jadhav, A.V. Kadam, Supercapacitors for the Next Generation, Intech Open, 2020.

Date: ***3 March 2025***

Place: Thane ***Dr. Amar L. Jadhav***