

### **BIO DATA**

**Name** : Dr. ATULA UDAY PATIL

**E-mail:** : atula\_jadhav@yahoo.co.in

**Educational Qualification** : M.Sc.Ph.D

**Teaching Experience:**



Name of Institute	Post	Period
Shri Vijaysinha Yadav Arts and Science College Peth vadgaon	Lecturer	14 June 2006 to April 2007
Tataysaheb Kore Institute of Engg. And Technology, Warananagar	Lecturer	From 16 <sup>th</sup> July 2007 to 10 sep.2009
Department of Technology, Shivaji university, kolhapur	Lecturer	From 11 sep.2009 to 18 dec.2011
Institute of Science, Mumbai	Assistant Prof.	21 Jan. 2012 to 4 Aug 2014
Rajaram College, Kolhapur	Assistant Prof.	5 Aug.2014 to till date

### **Research experience:**

Position	Institution	Dates
<b>Project Technician</b> U.G.C., New Delhi, Superconductivity R & D Project, Electrochemical processing and critical current studies of Thallium and Mercury based superconducting films and tapes	School of Energy Studies, Department of Physics, Shivaji University, Kolhapur- 416 004 INDIA	30/10/2001 to 21/03/2002
<b>Project Assistant</b> U.G.C., New Delhi, Superconductivity R & D Project, Electrochemical processing and critical current studies of Thallium and Mercury based superconducting films and tapes	School of Energy Studies, Department of Physics, Shivaji University, Kolhapur- 416 004 INDIA.	22/03/2002 to 30/11/2002

**Research Awards during Ph.D work :**

MNES New Delhi, Govt. Of India awarded JRF under National Renewable Energy Fellowship scheme from 2002-2005.

**Participation in Training/workshops/RC/OP:**

1. “STP: Foundation training program for Assistant Professor in Higher Education Department,” organized by YASHDA, Pune 29 July to 10 Aug.2013.
2. Worked as organizing member for Awareness workshop on Consortium for Scientific Awareness” organized by Department of Physic , Rajaram college, Kolhapur on Feb .2015
3. Worked as Examiner/ Judge for essay competition organized by Marathi Vidyan Parishad, Kolhapur on 30/11/2016.
4. General Orientation Programme attended from 2/12/16 to 29/12/16 at Department of Technology, Shivaji University, Kolhapur
5. Familiarization workshop on patents and IPR” organized by research committee, Rajaram college, Kolhapur on 8 Feb. 2017.
6. Refresher course on “Recent trends in Physics of Materials Science and Technology” participated from 17 July 2017 to 5 Aug 2018 at JNTU, Hyderabad.
7. One day teacher workshop on “New changed syllabus of B.Sc. I Physics (CBCS) on 24 Aug 18 at D. P. Bhosale College, Koregaon.
8. Worked as organizing member for workshop on “Frontiers in interdisciplinary Research”, organized by Department of physics on 18 th Jan 2018.
9. Worked as organizing member for Awareness programme on different government scholarships for students on 30th Aug . 2019
10. Workshop on revised B.Sc. II curriculum of Physics Paper VIII at Rajarshi Chhatrapati Shahu college, Kolhapur on 16/9/2019.
11. Convenor for National Seminar on Indian Space Research Programme : Legacy of Dr. Vikram Sarabhai organized by Department of physics on 28 Dec.2019
12. Swayam ARPIT online Refresher course on Teacher and Teaching in Higher Education on 16/02/2020
13. Two week FDP on “ Managing online classes and co-creating MOOCs” organized by TLC Ramanujan College, University of Delhi from April 20-May 2020

14. “Effective and Efficient Online Teaching in the age of Corona, A hands on workshop” online training organized by Teaching Learning Centre (ICT) at IIT Bombay on 23 May 2020.
15. Completed One week FDP on “Model Based Simulations in Classical Physics Using XCOS”, 15 - 21 November, 2021 Organized by Department of Physics and Astronomical Sciences Central University of Himachal Pradesh (CUHP) and Indian Association of Physics Teachers(IAPT)
16. Completed SWAYAM ARPIT Online Refresher course on Pedagogical Innovations And Research Methodology (Interdisciplinary) From 1st Dec 2020 to 31st March 2021 (examination held on 21/08/2021) Guru Jambheshwar University of Science & Technology Hisar, Haryana
17. One day workshop on Advances in Energy storage technology organized by the Shri Shahaji chhatrapati Mahavidyalya, Kolhapur on 6/12/22
18. Completed Online One week National level FDP on PYTHON 22/08/22 to 27/08/22 organised by Yashoda Shikshan Prasarak mandal Satara
19. Completed Online One week FDP on “ NEP – 2020, New Trends in Higher Education” from 29 /8/202 to 4/09/2022 organised by TLC Ramanujan College in collaboration with PMMMNMTT, University of New Delhi.
20. UGC – Approved Short term FDP on “ Implementation of NEP-2020 For University and College Teachers from Dec.21-31, 2022
21. Completed MS-DEED Level 1 In-Person Workshop: “Introduction to Innovative Pedagogies for College Teachers” from 18th to 20th January 2024 at *Rajaram College, Kolhapur* conducted by IISER Pune and supported by MSFDA.
22. Participated in One day workshop on Cyber Security Awareness organized by - Shri Shahaji Chh. Mahavidyalaya, Kolhapur on 25/01/24
23. Completed One day workshop : Hands on training on research related softwares at Rajaram College, Kolhapur on 27 feb.2025

#### **Invited talk / Resource person/Guest lectures**

1. Worked as resource person for the remedial class at B. Tech. I at Department of Technology July 2019, Shivaji University, Kolhapur.
2. Invited as a Chief guest at Abhinav Vaykhanmala 2022 (8<sup>th</sup> year) organized by Abhinav Prathishtan , Shigaon
3. Worked as a Resource person for VIBGYOR school visit to Department of Physics on 6<sup>th</sup> Feb. 2025.

**Membership:**

**Member on board of studies in Physics** of Autonomous Mahavir Mahavidyalaya,  
Kolhapur

**Sub committee Member on board of studies in Physics of Shivaji University, Kolhapur**

**Life member** of the Indian Association of Physics Teacher ( Membership number-  
13671L8675)

**Government Representative:**

- DE representative for Physical verification of Students in Colleges
- Government Observer for B.Ed. CET examination
- Government Observer for ( 3yr and 5 yr) L.L.B CET examination

**Organized:**

- National Seminar On Indian Space Research Programme: Legacy Of DR. VIKARAM SARABAI on 28<sup>th</sup> december 2019.
- One day workshop on Womens Personality and Safety at workplace on 5/12/2022.
- Organised a Guest lecture for teaching and non teaching faculty member on Ekam experience : Feel a stress free mind on 12/12/2022

**Books/Chapter in Books :**

1. **A. B. Jadhav** and S.H. Pawar, “Applications of Superconductors in energy”, A Book Chapter , Narosa Book Publishers, New Delhi, 2003.
2. Published Book chapter in book COVID 19: Impact and Response Volume VII (ISBN: 978-93-91768-52-2) chapter ROLE OF ELECTRONICS AND COMMUNICATION IN COVID - 19 PANDEMIC, V. S. Gaikwad and **A. U. Patil**, pp 11-20

**List Of Research Publications :**

❖ **Journal Publications : 10**

1. **A. B. Jadhav** and S.H. Pawar, "Electrochemical Synthesis of Superconducting Magnesium Diboride thin Films: A Novel Potential Technique", **Superconductor Science and Technology**, **16(2003)752**.
2. **A. B. Jadhav**, K.M. Subhedar, R.S. Hyam, A. Talpatra, Pintu Sen, S. K. Bandyopadhyay and S.H. Pawar, "Formation of  $MgB_2$  at ambient temperature with an electrochemical process: a plausible mechanism" **Superconductor Science and Technology**, **18 (2005)L29**.
3. S. H. Pawar, P. M. Shirage, D. D. Shivagan and **A. B. Jadhav**, "Novel room temperature electrochemical deposition of high temperature superconducting films" **Modern Physics Rev. B** **18(12-13) (2004) 505-549**.
4. P.M. Shirage, D. D. Shivagan, **A.B. Jadhav**, and S.H. Pawar, "Thickness dependent transport properties of Tl-2223/Al heterostructure" **Indian J. Cryogenics Council** **28(3) (2003) 103**.
5. **A. B. Jadhav** and S. H. Pawar, "Recent Advances in Development of  $MgB_2$  Superconductor for Applications" **Indian J. Cryogenics Council** **28(3)(2003) 90**
6. **A. B. Jadhav** and S. H. Pawar, "Studies on electrochemical synthesis of  $MgB_2$  films and their superconducting behavior." *Proceedings of the DAE solid state physics symposium. V. 50*. 2005.
7. S.H. Pawar **A.B. Jadhav**, P.M. Shirage, and D. D. Shivagan," Electrochemical Synthesis of Superconducting  $MgB_2$  thin films: a novel potential technique", arXiv preprint cond-mat/0207406
8. **Atula U. Patil**, Uday Patil and Swati Deshmukh," The progress in the Iron pnictides Superconductor" Journal of Emerging Technologies and Innovative research" Aug 2023 Vol 10 Issue 8, h384-h389
9. SP Deshmukh and **A U Patil** "Multiwavelength Study of Star Formation in NGC 3413" International Journal of Research in Academic World ,2023; 2(2):140-144.
10. Eknath C. Patil, Shashikant D. Lokhande, Uday A. Patil, **Atula U. Patil** , Jayendra Kumar,, "Optically transparent dual-band antenna for UHF and S-band applications" **Optical Materials Vol 114** Jan.2024, 114615.

11. Uday A. Patil, Anandrao A. Kakade and **Atula U. Patil**, “Low Cross-Polarization High-Isolation 2-Element MIMO Antenna for Unmanned Aerial Vehicle”, **Int. J. Electron. Commun. (AEÜ)** 177(2024) 155164.

❖ **Seminars/ Conferences/Workshops:**

1. **A. B. Jadhav** and S. H. Pawar “Electrochemical Synthesis of Superconducting Wires For Large Scale Energy Applications”, National Symposium on Recent Advances in Renewable Energy Technologies, Kolhapur, Aug.13-15, 2002.
2. Rani A. Sutar, P.M. Shirage, D.D. Shivagan, **A. B. Jadhav** and S. H. Pawar, “Studies on Fabrication of Optical Sensor with Tl-2223 Superconductor Films”, National Symposium on Recent Advances in Renewable Energy Technologies, Kolhapur, Aug.13-15, 2002.
3. **A. B. Jadhav** and S. H. Pawar “Electrochemical Synthesis of Superconducting Wires For Large Scale Energy Applications”, National Symposium on Recent Advances in Renewable Energy Technologies, Kolhapur, Aug.13-15, 2002.
4. S. H. Pawar, **A. B. Jadhav**, P.M. Shirage and D. D. Shivagan , "Synthesis Of Superconducting MgB<sub>2</sub> Films By A New Novel Route" MRSI 13<sup>th</sup> AGM Hyderabad, Feb, 7-9, 2002.
5. P. M. Shirage, D. D. Shivagan, **A. B. Jadhav**, and S.H.Pawar, “Studies on Electrochemical Oxidation and Structural Properties of TBCCO Superconducting Films", MRSI 13<sup>th</sup> AGM Hyderabad, Feb, 7-9, 2002.
6. D. D. Shivagan P. M. Shirage, **A. B. Jadhav**, and S. H. Pawar, "Photoinduced Effects in Pulse Electrodeposited Ag/Hg-1223/CdSe Hetero Nano-Structures" MRSI 13<sup>th</sup> AGM Hyderabad, Feb, 7-9, 2002.
7. **A.B. Jadhav**, P. M. Shirage, D.D. Shivagan, L. A. Ekal and S. H. Pawar “ Studies on Synthesis Of Superconducting MgB<sub>2</sub>Film”, Seventh International Symposium on Advances in Electrochemical Science and Technology, Chennai (Madras), Nov. 27-29, 2002.
8. P.M. Shirage, D. D. Shivagan, L.A. Ekal, **A. B. Jadhav** and S. H. Pawar “Studies on Photoinduced Changed in Electrochemically Synthesized Tl-Ba-Ca-CuO Superconducting films”, Seventh International Symposium on Advances in Electrochemical Science and Technology, Chennai (Madras) , Nov. 27-29, 2002.
9. D. D. Shivagan, P. M. Shirage, L.A. Ekal, **A. B. Jadhav** and S.H. Pawar “Pulse Electrodeposition of Ag/Hg-1223/CdSe Heterostructures and their Interface Studies”,

Seventh International Symposium on Advances in Electrochemical Science and Technology, Chennai (Madras), Nov. 27-29, 2002.

10. L. A. Ekal, D.D.Shivagan, P.M. Shirage, **A. B. Jadhav** and S. H. Pawar, “Electrochemical Oxidation of Y-Ba-Cu and Tl-Ba-Ca-Cu Alloy Films Using an Alkaline Bath,” Seventh International Symposium on Advances in electrochemical Science and Technology, Chennai (Madras) , Nov. 27-29, 2002.
11. **A. B. Jadhav** and S. H. Pawar “Studies on Growth Mechanism of  $\text{MgB}_2$  Films by Electrochemical Route” 14<sup>th</sup> AGM-Materials Research Society of India, BARC, Mumbai, Feb.11-13, 2003.
12. **A. B. Jadhav**, S. P. Kharade, P. M. Shirage and S. H. Pawar, “Study of Copper Doping in  $\text{MgB}_2$  Films” MRSI –15<sup>th</sup> AGM, BHU Varanasi 9<sup>th</sup> –11<sup>th</sup> Feb. 2004.
13. B. B. Patil, **A. B. Jadhav** and S. H. Pawar, “Electrodeposition and Nucleation Growth Mechanism of  $\text{Ce}_{0.8}\text{Sm}_{0.02}\text{Ni}_{0.18}\text{O}_{1.9}$  Thin Films”, ICEPS-2004, Hyderabad, 20-21 Dec.2004.
14. **A. B. Jadhav**, D. M. Phase, V. Ganeshan and S. H. Pawar, “Effect of Post heat Treatment on Surface morphology of  $\text{MgB}_2$  Films”. 16<sup>th</sup> AGM, MRSI NCL Pune, 10<sup>th</sup> -12<sup>th</sup> Feb. 2005.
15. R.S. Kalubarme, M. B. Kadam, **A. B. Jadhav** and S. H. Pawar, “Substrate dependent Voltammogram Studies of Electrochemical Bath to Prepare Clusters of Tl-Ba-Ca-Cu in Thin Films” 16<sup>th</sup> AGM, MRSI NCL Pune, 10<sup>th</sup> -12<sup>th</sup> Feb. 2005.
16. B. B. Sinha, **A. B. Jadhav** and S. H. Pawar, “Voltammetry Study of  $\text{MgB}_2$  Films on Different Substrates”, 16<sup>th</sup> AGM, MRSI NCL Pune, 10<sup>th</sup> -12<sup>th</sup> Feb. 2005.
17. Attended “National Seminar on Materials Processing and Characterization Techniques (NS-MPCT)” from 28-29<sup>th</sup> March 2005 at Shivaji University, Kolhapur.
18. ISTE workshop on “ Solar Photovoltaics: Fundamentals, Technologies and Applications”, conducted by Indian Institute of Technology Bombay from 12-22 Dec.2011.
19. National conference on , “Materials for Future Technology (2014)” organized by Department of Physics, Rajaram college, Kolhapur on 25-26<sup>th</sup> Sep .2014



20. National conference on ,“Recent Trends & Future Prospects in Microbiology” organized by Department of Microbiology, Rajaram college, Kolhapur on 4-5<sup>th</sup> Oct. 2014
21. One day workshop on Choice Based Credit System under lead college scheme at Rajaram college, Kolhapur on 3 Oct 2015.
22. One day seminar in physics, “Recent Developments in Physics on 19 Jan 2017 organised by Department of Physics , Rajarshi Chhatrapati Shahu College Kolhapur.
- 23.** “One day seminar on “Energy Audit – Do it yourself” organized by Institution of Engineers Kolhapur and DOT, Shivaji University, Kolhapur.
24. Participated in Two days online International conference on advances in science and technology (ICAST-2022) on 9 and 10 March 2022 organised by Rajarshi Shahu college, Kolhapur.
25. Attended online webinar on “Nanomaterials for Harnessing Solar Energy ” organized by the Indian Women Scientists’ Association, supported by BRNS-DAE and Internal Quality Assurance Cell, Rajaram College, Kolhapur on 30 March 2022 .\
26. Participated in One day International conference on Recent Trends in Fabrication of Nanomaterials and Their applications (ICRTFNA-2023) organised by Rajashri Chh. Shahu College, Kolhapur on 15/03/2023
27. Attended 2<sup>nd</sup> International conference on environment, Agriculture, Human and Animal health VOICE INDIA, AIITE, New Delhi, India, Somnogen Canada Inc, Toronto Canda, NEXUS India Organized by Dept. of Botany and Geology, Rajaram college, Kolhapur on 20 and 21 July 2023.
28. Participated in 8<sup>th</sup> International conference on Microelectronics, Electromagnetics and Telecommunication (ICMEET-2023) organised by Department of Electronics and Communication Engineering, National Institute of Technology , Mizoram , India on 06-07 October 2023.
29. Attended Three days International Webinar on “Electronic Waste and Sustainable Development” organized by department of Electronics Shivaji University, Kolhapur on 13-15 February 2024.