

Shri Shivaji College of Arts, Commerce and Science, Akola
Faculty Profile (Bio-data of faculty members)



Name : Rajkumar Vithalrao Salodkar
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 ,Akola
 Mobile no. : 9423127228
 E-mail address : salodkarrv19 @gmail.com
 Designation : Associate professor & HOD
 Department : Physics
 Date of birth : 19 Jan 1963
 Area of specialization : Solid State Physics & Solid Electrolyte
 Academic qualification : M.Sc-Physics

Examination passed	University	Subject / Specialization	Year of passing	Division/ Grade/ Merit
Bachelor's Degree	Nagpur University	Phy, Chem, Maths	1983	Second
Master's Degree (M.Sc.)	Nagpur University	Solid State Physics & Acoustics	1986	First

Membership of Academic Organizations : ISCA ,IPA,NUTA,AUPTA ,DATA

Research Experience : Two and Half year JRF UGC fellowship : Nagpur

Univ. **Guiding M. Sc. Project – 70**

Guiding Ph.D. students - Nil

Publishing research papers. (Give the complete list)- 13

ii] Research paper published: -

1] Enhancement of ionic conductivity of Lithium borophosphate glass; a mixed glass former effect. R.V.Salodkar, V.K.Deshpande and K.Singh. Journal of power sources 25[1989] 257-263

.2] Enhancement of ionic conductivity by dispersion of glassy phase into Na₂SO₄ K.Singh and R.V.Salodkar Bull of electron 5(10) Oct 1989 pp. 778-780.

3] An Investigation of lithium conducting borate glasses in the light of preparative mode.

P.R.Gandhi, R.V.Salodkar and K.Singh Ferroelectrics Journal Of America 1990-102,45-51.

4] Conductivity and density measurement of mixed alkali borate glasses.

K.Singh and R.V.Salodkar 5th National conf. On Solid-State Ionic's Feb.02 pp(115-117)

- 5] Nonlinear absorption of L-arginine capped ZnO nano-suspension Special Nonlinear absorption of L-arginine capped ZnO nano-suspension Special,National conference on Material Science-Trends and future-2014 ,Bharatiya Mahavidyalaya, Amravati10-11Jan2014
- 6] Effect of PVP as capping agent on the optical properties of ZnO nanoparticles page121-125 National Seminar on Recent trends in Mathematics, Physics and their application NCRTMPA-2014, Khandelwal College,Akola19th March2014
- 7] Structural and Electrical Properties of Magnesium Oxide Nanoparticles Synthesized By Chemical Co-Precipitation Method M. R. Belkhedkar ^{a,b}, R. V. Salodkar ^a,G.P. Save ^b, A.V. Mitkari ^b, Y. S. Sakhare^b, A. U. Ubale^{b*}
^a Department of Physics, Shri Shivaji College, Akola 444003, Maharashtra, India
^b Nanostructured Thin Film Materials Laboratory, Department of Physics, Govt. Vidarbha Institute of Science and Humanities, VMV Road, Amravati 444604, Maharashtra, India.
- 8] Farhan Ahmed, M. R. Belkhedkar, **R.V.Salodkar**, "[Physical properties of nanostructured strontium oxide thin film grown by chemical bath deposition technique](#)", AIP Conference Proceedings, 1953(1) (2018) pp.030105.
- 9] Ishaque Ahmad, M. R. Belkhedkar, **R.V.Salodkar**, A.U.Ubale, "[Physical properties of nanostructured CeO₂ thin films grown by SILAR method.](#)" AIP Conference Proceedings 1953 (1) (2018)pp. 030102.
- 10] **R.V.Salodkar**, M.R.Belkhedkar, S.D.Nemade, "[Structural, electrical and optical properties of nanostructured ZrO₂ thin film deposited by SILAR method](#)", AIP Conference Proceedings 1953 (1) (2018), pp. 030137.
- 11] M. R. Belkhedkar, **R. V. Salodkar**, K.D. Sarode, S. B. Sawarkar, A.U. Ubale, "Structural and optical properties of nanostructured Zirconium di-sulphide thin film grown by SILAR method.", AJANTA VIII (I) (2019) 159 – 163.
- 12] M. R. Belkhedkar, **R. V. Salodkar**, C.C. Chaudhari, S. B. Sawarkar, A.U. Ubale, "Structural and optical properties of Antimony Trioxide nanoparticles prepared by chemical precipitation method.", Research Journey SPL 110(I) (2019) 21 - 24.
- 13] M. R. Belkhedkar, Mohd. Razique, **R. V. Salodkar**, S. B. Sawarkar, A. U. Ubale, "Structural and optical properties of nanostructured Manganese disulphide thin film grown by SILAR method", Aayushi International Interdisciplinary Research Journal, Spl.Vol. 66 (2020) pp. 189 -191.

Seminars/ Conferences/ Symposia/ Conferences attended :- Twenty five

Seminars/ Conferences/ Symposia/ Conferences organized :- **Three**

1	National Seminar on "Current Trends In Physical Sciences& Electronics Research."	UGC & Dept. Of Physics & Electronics, Shri. Shivaji College Akola	Mar. 28,2010	Convener of National Conference
2	2 nd Shivaji Vidnyan Parishad Shri Shivaji Shikshan Sanstha, Amaravati & Homi Bhabha Center for Science Education(HBCSE) Tata institute of Fundamental Research (TIFR),Mumbai Jointly Organized Science Conference	Venue :- Shri Shivaji College of Arts ,Commerce and Science, Akola	December 20-22, 2014	Organizing Secretary

3	National conference on “Recent Advances in Physical and Mathematical Sciences ” NCRAPMS-2020 on	Shri Shivaji Education Society, Amravati Sponsored Organized by Shri Shivaji College of Arts, Commerce and Science, Akola.(M.S)	18 th January 2020	Organizing Secretary
4	National e-Quiz competition ,on occasion of Environment Day https://forms.gle/MCuXpSx1Dc67Z3VM6	Shri Shivaji College of Arts, Commerce and Science, Akola.(M.S) and Department of Physics	Day - 5/June/2020	HOD Physics R.V.Salodkar and Dr. R G Deshmukh coordinator
5	Students International Online Video Contest on Science innovation- https://chat.whatsapp.com/LUPKxMWjgvUA2Ght7yQlrB	Shri Shivaji College of Arts, Commerce and Science, Akola.(M.S) and Department of Physics	10June 2020.[PDF]	Chief organizer Dr.R.M.Bhise Dr.A.S.Raut Prof.R.V.Salodkar

14. Research Projects Completed / Ongoing

Title of the project	Name of the funding agency	Duration	Remarks
Development of mixed conducting glasses for electrochemical devices.	UGC, Pune	Yr.2005-2007	Project Completed Successfully

15. Teaching Experience :- U.G.-Physics Subject - 31 years

P.G. –Physics Subject -25Years

16. Orientation & Refresher Courses Other (Career Oriented Programme) :-

i) Orientation course -Nagpur Uni.-8 Aug to 4 Sept. 1990.

ii)Refresher course-Rani Durgavati Univ. Jabalpur-1 Nov to 21 Nov 95.

iii)Refresher course-Amravati Uni., Amravati-15 Feb to 10 March 1999.

iv)Refresher course-Amravati Uni., Amravati-5 June to 28 Jun 2004 Years

16. Innovations/ Contributions in Teaching :-

Design of Curriculum :- For classroom lectures

Teaching Methods :- For UG- 1)Usual Classroom teaching method adopted usually along with some model ,Chart and OHP used for special lectures as when required &ICT.

:-PG –Physics: - LCD , OHP and Classroom, PPT used

:- **During Corona Pandemic online Lectures** delivered for UG and PG classes

Laboratory Experiments: -i] Induction programme for UG & PG for newly admitted students.

ii] Experimental Demonstration, followed by explanation on actual practical .

ii] Encouraging students to fabricate and design various experiments based on syllabus.

Preparation of resource materials:- i]Notes on theory as well as practical are distributed and some reference books for up-to-date knowledge are recommended.

ii]Practical manuals were prepared for each experiment and made available for students.

iii] Question Bank prepared as per Unit wise and distributed to students

Remedial teaching :- Guidance to the students weak in studies during free and spare time.

For P.G.- Project guidance , Total = 79 Project guided

17]Extension activities/ consultancy/ community works:- College

Food distribution next day of Dasara rally - 2/10/1016

Contributed for one day food NSS college, Keliveli camp-

9 to 15 Dec 2016

Contributed to **Corona Pandemic** Chief Minister fund personally-**31/5/ 2020**

18. Role in college activities:- Work as a Conveners of i]P.G. Physics Coordinator

ii] Science Exhibition iii] Parent Interaction committee

iv] National Science Day 28th Feb

v] Hiroshima Day-6th Aug vi] Welcome Function and Send of Function

19. Write regularly Articles in College magazine “Shivdhyan” on various topics.

20. Role in university activities :- Valuation, Practical Examination, Invigilation

Subject Examination comm., College, Paper Setting, Moderation, Valuation, Internal and External for University Practical Exam.

University Subject Expert for Promotion under CAS.

21. Membership / participation in Activities of national development:-

Life Member of Indian Science congress Association, Kolkata

Life Member of Indian Physics Association

Life Member Amravati University of Physics Teacher Association [AUPTA]

Life Member of NUTA

Life Member of DATA