

**Shri Shivaji Vidya Prasarak Sanstha's Late S. D. Patil alias Baburao Dada
Arts, Commerce and Late Bhausahab M. D. Sisode Science College
Shindkheda, Dist. Dhule.**

**Faculty Profile.
(Information of last five years 2018- 2023)**



1	Name of the faculty	:	Dr. Umeshkumar Prabhakar Rao Khairnar
2	Name of the Department	:	Physics
3	Educational qualifications.	:	M.Sc., Ph.D.
4	Present position:	:	Associate Professor
5	Address for correspondence	:	SSVPS's ACS College Shindkheda, Dist. Dhule. 425406
6	E-mail and contact number:	:	Upkhairnar75@gmail.com 9420076444
7	Specialization	:	Physics with Electronics
8	Total teaching experience:	:	15 Years
9	Courses taught:	:	F. Y. B. Sc, S.Y. B. Sc, T. Y. B. Sc,
10	Research experience:	:	18 years
11	Major research projects completed:	:	Nil.
12	Minor Research project completed	:	"Growth and Characterization of CdxPb(1-x)Se Ternary Compound Thin Films." UGC (WRO), Rs. 155000/- Completed March 2012

13. Number of students registered for Ph.D. degree:

Sr. No.	Name of the Student	Research Project	Date of Registration	Date of declaration
	Nil	Nil	Nil	Nil

14.: International, national, state or university level, attended. Presented paper, chaired session. Resource person

Papers presented/Participation in seminars, conferences				
Sr. No.	Title of the paper presented	Title of Conference / Seminar	Venue	Date
1	Synthesis and characterization of Co-evaporated PbSe Thin Films	"National Conference on Non-conventional Energy Sources for the Rural Development of India."	Department of Physics, Uttamrao Patil Arts & Science Collage, Dahivel	6 th January 2018

2	Charge Transport Stable Schottky Barriers on p-Zn _x Pb _(1-x) Te Thin Films	“International Conference on Advances in Functional Materials(ICAFM-2018)”	Department of Physics, K.T.H.M. College, Nashik	12 & 13th Jan. 2018.
3	The effect of Zn concentration upon structural and optical properties of Zn _x Cd _{1-x} Te thin films	“4th International Conference on Physics of Materials and Materials Based Device Fabrication.” (ICPM-MDF-2019)	Department of Physics, Shivaji University, Kolhapur	10 th -11 th January, 2019
4	Effect of Composition on Thermal Evaporated Lead Selenide Sulphide Thin Films	“National Conference on Recent Trends in Life Sciences” (RTILS-2019)	S.S.V.P.S ACS College, Shindkheda	18 th January 2019
5	Structural Thermoelectric Properties of Zn _x Pb _(1-x) Te Thin Film by Thermal Evaporation	“National Conference on Material Science: Advancement and Innovations.” (NCMSAI-2019)	Department of Physics, S.S.V.P. L.K.Dr.P.R. Ghogrey Science College, Dhule	20 th February 2019
6	Synthesis and Characterization of Ternary Thin Films of Bi ₂ Te _(3-x) Se ₃	“International Conference on Smart Materials and Nanotechnology.” (ICSMN-2020)	Department of Engineering Physics SKN Sinhgad College of Engineering, Pandharpur	02-04 January 2020
7	The Study of Stable Schottky Barriers on p-Zn _x Pb _(1-x) Te Thin Films	“National Conference on Nanostructured and Amorphous Materilas: Synthesis, Characterization and Applications.” (NAM-RAMAN:2020)	School of Physical Sciences, Moolji Jaitha College, Jalgaon	28 th – 29 th February 2020
8	Effect of Composition on Thermal Evaporated Thin Films of Bi ₂ Te _{3x} Se _{3(1-x)}	One Day International e-Conference on “Ethical and Quality Aspects In Nanoscience and Nanotechnology Research.” (ICEQANNR-2020)	Vasantrao Naik Art's, Commerce and Science College, Shahada	20 June 2020.
9	Structural and Electrical Properties of Zn _x Pb _(1-x) Te Thin Films By Thermal Evaporation	National e-Conference On "Recent trends in Chemical and Physical Sciences (NCRTCPS-21)	Departments of Chemistry, Physics, Electronics, Mathematics and Computer Science of S.V.S's Dadasaheb Rawal College, Dondaicha	1 st September 2021

10	Effect of Composition on Vacuum Evaporated $Cd_xPb_{(1-x)}Se$ Solid Solution Thin Films	International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2022)	UGC-DAE Consortium for Scientific Research, & Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh, India	13-17 December 2022.
11	GROWTH AND CHARACTERIZATION OF $Zn_xPb_{(1-x)}Te$ THIN FILMS BY VACUUM EVAPORATION	3rd International Conference on Multidisciplinary Academic Research and Innovation (ICMARI-2023)	Aryabhat Institute of Academics and Research and Khun Khun Ji Girls PG College, Lucknow	29-30 April 2023
12	Structural, Electrical and Optical Properties of Thermally Evaporated $(PbSe)_x(PbS)_{1-x}$ Thin films	6th National Conference on Advanced Materials and Radiation Physics (AMRP-2023) (HYBRID MODE)	Department of Physics Sant Longowal Institute of Engineering and Technology Longowal, Distt. Sangrur-148106 (Punjab)	18-19 May 2023

15; Participation in Conference/ Seminars/ Workshops Webinars Etc.

Participation in in seminars, conferences workshops				
Sr. No.	Level of Seminars Conferences /workshops organized	Title of Seminars Conferences/ workshops	Organizers	Duration
1	One Day National Workshop	Revised Assessment and Accreditation Framework of NAAC	Adarsh College of Arts, Nijampur-Jaitane Tal. Sakri Dist. Dhule	27 January 2018
2	University Workshop	Re-Structuring the Syllabus F. Y. B. Sc. (Physics) as CBCS pattern	Arts, Commerce and Science College, Taloda Dist. Nandurbar	30th June 2018
3.	University Workshop	Research Guides (Highlighting the Ph. D. Rules & Procedure w.e.f. April 2017)	K.V.P.S. S.P.D.M. College, Shirpur	7 th February 2020.

4	University Workshop	Member for T. Y. B. Sc. Physics (CBCS Pattern) Syllabus Framing	Using ICT tools in the WORK FROM HOME Mode	26/03/2020 to 20/05/2020
5	Online National Webinar	COVID-19 Pandemic General Awareness Quiz	Vidya Vikas Mandal's Sitaram Govind Patil Arts, Science and Commerce College, Sakri (Dist. Dhule)	18 th April 2020
6	Online National Webinar	"COVID-19 Pandemic Awareness Quiz"	Student Development Department of SSVPS College, Shindkheda. Dist:-Dhule	19 th April 2020
7	Online National Webinar	"World Book Day Calibration Quiz"	Central Library and Commerce Department of SSVPS College, Shindkheda. Dist:-Dhule	23 rd April 2020
8	National Webinar series on	"Super capacitors, Solar Cell Devices and Solar Thermal Technology"	Department of Physics and Solar Energy Research Center (SERC), RCOEM, Nagpur	11-14 May 2020
9	University Workshop	Curriculum Development in Physics at T.Y.B.Sc. (CBCS Pattern)	KBC NMU Jalgaon and PSGVPM ASC College Shahada	16 th May 2020
10	National Web Conference	Biomedical Instrumentation and It's Applications	Department of Electronics, Kamla Nehru Mahavidyalaya, Nagpur	21 st May 2020
11	Online National Webinar	Analytical Characterizations Instruments, Phase-II FTIR and its Application and Applications of Thermal Analysis	Department of Plastic and Polymer Engineering, Maharashtra Institute of Technology, Aurangabad	25 th May 2020
12	Online Webinar Series 2020	"Study of Emerging Fields in Physics"	Department of Physics, R. C. Patel College, Shirpur	26 th May to 1 st June 2020.
13	One Day National Webinar	"National Education Policy 2020 - Challenges & Opportunities"	IQAC, PSGVPM's SIP Arts, GBP Science and STKVS Commerce College, Shahada, Dist.- Nandurbar	29 th May 2021
15	Online National Webinar	The Exam System- Have we lost our path?	Sheth NKTT College, Thane	24 th April 2021
14	University Workshop	Syllabus Re-Structuring at the F. Y. B. Sc. (CBCS Pattern) Physics	Nanasaheb Y. N. Chavan A. S. C. College, Chalisgaon, Dist. Jalgaon	11 th April 2022

16 Participation in co-curricular and extra-curricular activities.

- i) Worked as Member, IQAC Reaccreditation
- ii) Worked as Member, Research and Academic
- iii) Student Development Officer
- iv) Organized Blood donation Camps on 17.09.2022 at ACS College Shindkheda.

17. Refresher/Orientation/Faculty development Programme / short term courses attended.

Sr. No.	Name of the Programme	Title of FDP	Duration	Organizer
1	National Faculty Development Program	Solar Photovoltaic Fundamentals, Technology and Applications	July – Sep. 2019 (8 week course)	SWAYAM Funded by Ministry of HRD, Gov. of India
2	One Week Faculty Development Program	Nanoscale Devices: Materials to Applications	07 th Nov. 2019 to 11 th Nov. 2019	Centre for VLSI & Nanotechnology IIT Pune and AICTE/UGC/NBA Ministry of Electronic and Information Technology, Govt. of India
3	Two Weeks Faculty Development Programme	Refresher Course in “PHYSICS”	10 th April 2022 to 24 th April 2022	Teaching Learning Center, Ramanujan College, University of Delhi and Ministry of Education P.M.M.M. National Mission on Teachers and Teaching

18. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS.

- 1 **U. P. Khairnar**, S. S. Behere, P. H. Pawar, “Effect of Composition on Thermal Evaporated Lead Selenide Sulphide Thin Films,” **International Journal of Research and Analytical Reviews (IJRAR)**, UGC Listed Journal No.43602, ISSN 2349-5138, Volume 06, Issue 1, (2019), pp. 254-271.
- 2 **U. P. Khairnar**, S. S. Behere, P. H. Pawar, “Structural and Thermoelectric Properties of $Zn_xPb_{(1-x)}Te$ Thin Films By Thermal Evaporation,” **AJANTA**, UGC Listed Journal No. 40776, ISSN 2277-5730, Vol-VIII, Issue-1, (2019) pp. 209-213.
- 3 **U. P. Khairnar**, S. S. Behere, P. H. Pawar, “The Study of Stable Schottky Barriers on $p-Zn_xPb_{(1-x)}Te$ Thin Films,” **Journal of Engineering Sciences (JES)**, UGC Care Approved Group ‘II’ Journal Serial No. 20446. ISSN 0377-9254, Volume 11, Issue 4, (2020), pp. 1357-1359.

Abstract published in conference proceedings

1. Proceedings for 3rd International Conference on Multidisciplinary Academic Research and Innovation (2023) ISBN:978-93-95463-07-2

Research Citation:

Citation: **201**

h-index: **06**

i 10 index:**04**

19. Text Books Published:

Sr. No.	Title of the Book	Name of the Publisher	ISBN No.	Date of Publication	Pages
1	Thermodynamics and Kinetic Theory of Gases PHY-301, S.Y.B.Sc. Sem-III Paper-I (CBCS)	Kumud Publication and Vrinda Publication, Jalgaon	978-93-88834-16-2	1 st September 2019	84
2	Electronics-I PHY-302-A, S.Y.B.Sc Sem-III Paper-II (CBCS)	Kumud Publication and Vrinda Publication, Jalgaon	978-93-88834-13-1	1 st September 2019	123
3	Waves, Oscillation And Acoustics PHY-401, , S.Y.B.Sc Sem-IV Paper-I (CBCS)	Kumud Publication and Vrinda Publication, Jalgaon	978-93-88834-39-1	1 st December 2019	83
4	Optics and Laser PHY-402, , S.Y.B.Sc Sem-IV Paper-II (CBCS)	Kumud Publication and Vrinda Publication, Jalgaon	978-93-88834-34-6	1 st December 2019	122
5	Challenges and Opportunities in Science: A Multidisciplinary Perspective (Chapter-8)	Aryabhat Institute of Academics and Research, Lucknow, India	978-93-95463-09-6	2023	90-96

Association with professional bodies:

Life membership:

- 1] The Indian Association of Physics Teachers (IAPT).
- 2] Materials Research Society of India – Indian Institute of Science, Bangalore.