# Shri ShivajiCollege of Arts, Commerce and Science, Akola Faculty Profile

1. Name Sanjay Madhukarrao Palhade

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5. Designation Associate Professor

6. Department Physics

7. Date of birth 25<sup>th</sup> October 1964

8. Area of Specilization Digital Electronics & Solid State Physics

9. Academic Qualification:

Examination Passed	Board/ University	Subject/Specialization	Year of Passing	Division/Grade/ Merit
B. Sc.	Nagpur	Maths Physics Chemistry	1984	First
M. Sc.	Nagpur	Physics	1987	Second
NET	UGC CSIR Delhi	Physical Sciences	2002	Qualified
SET	Pune	Physical Sciences	2002	Qualified
Ph. D.	Amravati	Design and Analysis with Modelling and Simulation of a Microstrip Patch Antenna	2018	

#### 10. Membership of Academic Organizations :

Society for Promotion of Excellence in Electronics Education
(SPEED), University of Pune, Pune

#### 11. Research Experience :

11.	Research Experience :
	Guiding M. Sc. Dissertations – 20
	Research Papers:
1	"Fortran in physics laboratory" State Level Seminar on Recent Trends in Teaching Basic and Applied Sciences, 03 January, 2009, Phulsing Naik Mahavidyalaya, Pusad (Yavatmal).
2	"Inexpensive laser wavelength determination kit" State Level Seminar on Recent Trends in Teaching Basic and Applied Sciences, 03 January, 2009, Phulsing Naik Mahavidyalaya, Pusad (Yavatmal).



3	"Improving laboratory instructions" State Level Seminar on Recent Trends in Teaching Basic and Applied Sciences, 03 January, 2009, Phulsing Naik Mahavidyalaya, Pusad (Yavatmal).
4	"Nanotechnology and Indian agriculture" National Seminar on Photonic Materials and Nanotechnology, 23 January-24 January, 2009, Department of Physics, Electronics and Photonics, RajarshiShahu Mahavidyalaya, Latur.
5	"Effects of idol immersion on some water quality parameters of Morna river", National Level Seminar on Water, Energy, Environment & Society, 30 January, 2010, Phulsing Naik Mahavidyalaya, Pusad (Yavatmal)
6	"Study of physical properties of lead borate glasses" National Seminar on current Trends in Physical Sciences & Electronics Research, 28 March, 2010, Shri Shivaji College of Arts, Commerce & Science, Akola.
7	"Microstrip patch antenna for 1900 MHz band" National Conference on Recent Initiatives towards Green Electronics, 8 Feb - 9 Feb, 2013 Brijlal Biyani Science College, Amravati
8	"Semiconducting behaviour ofcadmium chloride doped polyaniline" National Conference on Recent Initiatives towards Green Electronics, 8 Feb - 9 Feb, 2013 Brijlal Biyani Science College, Amravati
9	"X-ray diffraction study of egg sac silk of Nephila pilipes" Recent Trends in Mathematics, Physics and their Applications, Akola.
10	"Optical and Structural Properties of L-Alanine Capped ZnO Quantum Dots" National Conference on Upcoming Trends in Chemical Science UTCS-2013, Pthardi.
11	"Design and Simulation of a Quarter Wavelength Gap Coupled Microstrip Patch Antenna" International Journal of Science & Research, vol 3, issue 10, 2014
12	"Design and Photo-lithographic Fabrication of Microstrip Patch Antenna" International Journal of Science & Research, vol 4, issue 2, 2015
13	"Fabrication and Characterization of a Quarter Wavelength Gap Coupled Microstrip Patch Antenna" International Journal of Science & Research, vol 4, issue 2, 2015
14	"Broadbanding Techniques for Microstrip Patch Antennas" New Interdisciplinary National Research Journal, 2279-0349
15	"Design and EMCoS Antenna VirtualLabTM Simulation of a Rectangular Microstrip Patch Antenna" New Interdisciplinary National Research Journal, 2279-0349
16	" Design and Simulation of a Dipole Antenna for

	GSM Band", 57-63, Ajanta, 2277-5730, 2016-17
17	"Massive Open Online Courses (MOOCs) for Enrichment of Teaching- Learning and Evaluation," 47-52, SCHOLARS IMPACT, 2394-7632, 2017-18
18	"ICT For Enhancements and Enrichment of Teaching Learning and Evaluation," 113-115, SCHOLARS IMPACT, 2394-7632, 2018-19
19	"Axial Mode Helical Antenna Design and Simulation for 1500 MHz", 51-57, AJANTA, 2277-5730, 2018-19
20	"Design and EC-FDTD Simulation of a Mircostrip Patch Antenna for 1950 Mhz",15-20, RESEARCH JOURNEY, 2348-7143, 2018-19
21	"Triangular Mircostrip Patch Antenna for 2100 MHz", 635-639, Journal of Emerging Technologies and Innovative Research (JETIR), 2349-5162, 2019-20

# Seminars/ Conferences/ Orientation/Refresher Courses attended and organised :

	Name of the Conf./ Seminar/Workshop	Place and Name of the Sponsoring Agency	Date
1	State Level Seminar on Recent Trends in Teaching Basic and Applied Sciences	Phulsing Naik Mahavidyalaya Pusad (Yavatmal).	03 January, 2009
2	National Seminar on Information Technology Enabled Services-	Shri Shivaji College Akola	11 April,2009
3	Total Solar Eclipse-09 Workshop TSE-09	SGB Amravati University, Amravati , UGC and SPACE, New Delhi	13-14 June 2009
4	National Seminar on "Current Trends in Physical Sciences & Electronics Research."	UGC & Dept. Of Physics & Electronics, Shri. ShivajiCollegeAkola	Mar. 28,2010
5	National Level Conference on Developing Frontiers of Physics, Astronomy & Space Science"	UGC & Dept. Of Physics & Mathematics, RLTCollege ,Akola	24-25 Sept., 2010
6	District Level Workshop on Role of Teacher for Quality Education with Reference to Sixth Pay Commission	Shri Shivaji College, Akola and office of the Joint Director, Higher Education, Amravati and SGB Amravati University, Amravati	10 April 2011
7	U.G.C. Sponsored 11th Orientation Programme	U.G.C. Academic Staff College,SGB Amravati University, Amravati	16 Jul 2011 to 12 Aug 2011

8	U.G.C. Sponsored Refresher Course in Computational Science(Physics)	U.G.C. Academic Staff College,SGB Amravati University, Amravati	09 Mar 2012 to 30 Mar 2012
9	National Conference on Recent Initiatives towards Green Electronics	UGC, DST and Brijlal Biyani Science College, Amravati	08-09 Feb 2013
10	Workshop on Electronics Teaching Study Material	Department of Electronics, University of Pune	22-23 April 2013
11	Workshop on Information and Communication Technology (ICT)	Dept of Commerce, Shri Shivaji College of Arts, Commerce & Science, Akola,	5-20 April 2013
12	Workshop on Communication English	Department of English Shri Shivaji College of Arts, Commerce & Science, Akola,	5-13 April 2013
13	UGC Sponsored National Conference on Recent Trends in Mathematics, Physics and their Applications	Shankarlal Khandelwal Arts, Science & Commerce College, Akola	19 March 2014
14	National workshop on Renewable Energy for Sustainable Development of Agriculture and Industries	Dr. Panjabrao Deshmukh Krishi Vidyapeth Akola	9 March 2015
15	SGB Amravati University Library Consortia for UG and PG Colleges training workshop	SGB Amravati University, Amravati	12 March 2015
16	One Day Orientation Workshop on Intellectual Property Rights, jointly organised by RUSA, Govt of Maharashtra, RGNIIPM Nagpur & Patent Cell, SGBAU	SGB Amravati University, Amravati	26 August 2016
17	NAAC Sponsored National Conference on Academic and Administrative Audit of Higher Educational Institutions	Shri Shivaji Science College, Amravati	09 October 2016

18	RUSA, Govt of Maharashtra one day workshop on I for Inclusion: Higher Education Module	Shri Shivaji College, Akola	20 January 2017
19	UGC Sponsored National Conference on Recent Advances in Chemical Sciences	Shri Shivaji College, Akola	26-27 February 2018
20	UGC Sponsored National Conference on Emerging Trends in Science	Vidya Bharati Mahavidyalaya, Amravati	1-2 February 2019
21	National Conference on Recent Advances in Science and Technology	Gopikabai Sitaram Gawande Mahavidyalaya, Umerkhed	5-6 March 2019
22	National Conference on Innovative Research in Science & Technology	Shri Shivaji Science College, Amravati	17-18 December 2019
23	National Conference on Multidisciplinary Research in Science and Technology for Healthy Lifestyle Management	Shri R.L.T. College of Science Akola	24 January 2020

## 13 Research Projects Completed / Ongoing :

Title of the project	Name of the funding agency	Duration	Remarks
FDTD Modelling and Simulation of a Microstrip Patch Antenna	UGC Minor Research Project	2 Years	Completed

## 14 Teaching Experience :

Courses Taught	Name of the University/ College/ Institution	Duration
UG	SGB Amravati University, Shri Shivaji College Of Arts, Commerce & Science, Akola	15 Years
PG	SGB Amravati University, Shri Shivaji College Of Arts, Commerce & Science, Akola	15 Years

Extension activities/ consultancy/ community works:

Donations to CM relief funds, Poor Boys fund, Flag Day fund, contribution to the prize distribution to the students fund

#### 16 Innovations/ Contributions in Teaching:

Teaching Methods:- conventional chalk and blackboard method enhanced with illustrations, notes, information collected from internet, biography of scientists and active participation of students, online teaching through Google Class Room during COVID 19 pandemic

Laboratory Experiments:- simplification of experimental procedures and experimental setups, first year students are given a practice course on using basic measuring instruments, graphical analysis etc.

#### 17 Role in college activities :

Worked as a member of college Placement and Student Guidance Cell, Worked as a member of college Science Association, Admission committee member, Gurdian Teacher, Central Instrumentation Cell member, IQAC member, AVISHKAR competition organising committee member etc.

#### 18 Role in university activities :

Valuation of B.Sc. I, II, III Physics examination papers, Conduct of B.Sc & M. Sc. Physics practical Examination, Invigilation during university & internal examinations.

## 20 Professional Development Activities during COVID 19 pandemic & lock down

	Program/Course	Duration
1	Advanced Course on Special theory of Relativity (Centre for Continuing Education Indian Institute of Technology Kanpur)	January 26 to May 19, 2020
2	Learning Physics Through Simple Experiments (Centre for Continuing Education Indian Institute of Technology Kanpur)	April 2 to June 10, 2020
3	National Level Faculty Development Programme On <b>G Suite and Allied Toolsin Education, Teaching&amp; E-Content Development</b> (Post-GraduateDepartment of Computer Science& Engineering, Sant Gadge Baba Amravati University, Amravati)	29/06/2020 to 04/07/2020
4	Recent Trends on RF & its Applications (IEEE Antenna & Propagation Society (APS) Chapter  – Jaipur & IEEE Rajasthan Subsection	June 26-30, 2020

	in association with Department of Electronics & Communication Engineering, Malaviya National Institute of Technology, Jaipur & Govt. Women Engineering College, Ajmer)	
5	International E-Conference on "Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World" (organized by Government Vidarbha Institute of Science & Humanities, Amravati, India)	15th - 17th May, 2020.
6	Antenna Design: Recent Trends & Applications (webinar organized by Department of Electronics, Govt. Arts College, Kulithalai 639120 (Tamilnadu))	10 <sup>th</sup> June 2020
7	Online District Level "NAAC AWARENESS WORKSHOP" (organized by Internal Quality Assurance Cell (IQAC) of Shri Shivaji College of Arts, Commerce & Science, Akola in Collaboration with RUSA, Maharashtra & Joint Director of Higher Education)	23 <sup>rd</sup> June 2020
8	HANDS-ON EXPERIENCE WITH ARDUINO USING VIRTUAL TOOL (conducted by Department of Electronics & Communication Engineering , PSCMRCET, Vijayawada, Andhra Pradesh, in association with PSCMR IEEE Student Chapter and IIC-MHRD from)	25-06-2020 to 27- 06-2020
9	Online Faculty development program on LaTex (organized by Department of Civil Engineering, RMD Sinhgad School of Engineering, Warje in association with Spoken Tutorial Project, IIT Bombay, Funded by National Mission on Education through ICT, MHRD, Govt. of India)	28th April to 2nd May 2020
10	DESIGN OF MICROSTRIP PATCH ANTENNAS (Webinar organized by Department of ECE, Sri Venkateswara College of Engineering and Technology (Autonomous), Chittoor, Andhra Pradesh)	11th June 2020
11	National Level Webinar on "WIRELESS TECHNOLOGY - What Why & Where", (Organized by the Department of Electronics, LRG Government Arts College for Women, Tirupur, Affiliated to Bharathiar University, Coimbatore)	13th June, 2020
12	Online Faculty development program on "Evolution of 5G" (organized by the Department of Electronics and Communication Engineering, KGiSL Institute of Technology, Coimbatore)	29-06-2020 to 05- 07-2020

13	Online Faculty development program on	16th- 20th, June
	"Advances in 5G-Wireless Communications with	2020.
	Hand on Experiences"	
	(organised by Department of Electronics and	
	Communication Engineering, Lendi Institute of	
	Engineering and Technology)	

## 21 NPTEL SWAYAM Courses completed with certification :

Sr. No.	NPTEL SWAYAM Course	Session
01	Antennas	2017-18
02	Applied Electromagnetics For Engineers	2017-18
03	Computational Electromagnetics & Applications	2017-18
04	Physics of Materials	2017-18
05	Machine Learning, ML	2018-19
06	Laser: Fundamentals and Applications	2018-19
07	Electromagnetic compatibility	2018-19
08	Roadmap for patent creation	2018-19
09	Non-Conventional Energy Resources	2018-19
10	Soft Nano Technology	2019-20
11	Acoustic Materials & Metamaterials	2019-20