

Personal Information of faculty

1. **Name (in Block Letters) :- Dr. SAPANA SUNIT RANE**
2. **Subject :- Electronics**
3. **Current Designation: - Asst. Professor, Head of Department, IQAC Coordinator**
4. **Date of Birth : 09/02/1970**
5. **Caste and category : Hindu-Maratha (Open)**
6. **Address (with Pin code):- C-16 Nalanda Garden ,Baner Road, Pune.**

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7. **Academic Qualifications:-**

Examinations	Name of the Board/ University	Year of Passing	Percentage of marks obtained	Division/ Class/Grade	Subject
B.Sc.	Shivaji	1990	83	First with distinction	Electronics
M.Sc.	Shivaji	1992	67	First	Electronics
SET	-----	1998	-----	-----	Electronics

8. Research Degree(s)

Degrees	Title of dissertation	Date of award	University
M. Phil.	Expert system vol.reg. design	Dec 1995	Shivaji University
Ph.D.	Synthesis and characterization of metal metal oxides nano structure :room temperature thin/thick film hydrogen sensor application	September 2018	S P Pune University

9. Appointments held prior to joining this institution

Designation	Name of Employer	Date of Joining	
		Joining	Leaving
Lecturer	Rajaram College, Kolhapur.	Dec 1992	April 1999
Lecturer	D.Y. Patil college, PUNE	June 1999	Nov 1999
Asst. Prof.	Mamasaheb Mohol College, PUNE	Nov 1999	Till date

10. Period of teaching experience:

P.G. Classes (in years) **05**

U.G. Classes (in years) **27**

11. Research Experience (in years) 08**12. Fields of Specialization under the research**

(a) Artificial Intelligence

(b) Material science, Nano technology, Gas sensors

13. Academic Staff College Orientation / Refresher Course attended:

Sr. No.	Course	Place	Duration	Grade
1	Orientation	ASC,UOP	04/10/2002 to 31/10/2002	B
2	Refresher	Electronics Dept, UOP	24/04/2009 to 14/05/2009	A
3	Refresher	Electronics Dept, UOP	08/11/2011 to 28/11/2011	A
4	Refresher	Physics Dept ,UOP	08/10/2012 to 28/10/2012	A
5	FDP	UGC HRDC,SPPU	19/03/18 to 25/03/18	----

14. CO-CURRICULAR, EXTENSION, PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES

Sr. No.	Type of Activity
	(i) Extension, Co-curricular & field based Activities
01	Worked as coordinator of one day University level seminar on DIGITAL SIGNAL PROCESSING conducted on 15 th JAN 2010
02	Worked as College coordinator of EEE exam conducted by SPEED.
	Worked as coordinator of two days workshop on mobile repairing organized in association with Student Welfare Board SSPU, on 12 th and 13 th December 2014.
03	Coordinator of Workshop on “Electronics Hobby Project Construction from 12/10 /2015 to 16/10/2015.
04	Coordinator of Three Days Workshop on “Computer Hardware and Networking” in association with Board of student Welfare ,SSPU and “UNISOFT COMPUTRADE PVT LTD , PUNE“ during 25 th to 28 th JAN 2016
05	Coordinator of Inter Collegiate Electronics Project Competition as a part of TECNOTHON 16, organized on 4 th FEB 2016
06	Coordinator of “I-SENSOBOTZ” a Two Days Workshop on ROBOTICS in association with Board of student Welfare ,SSPU,Robocart.com ,Mumbai and innovation cell IIT Bombay during 12 th and 13 th JAN 2017
07	Coordinator of One Day Workshop on “Internet of Things in association with IoTexperts.cc on 18 th FEB 2017.
08	Coordinator of “HANDS ON TRAINING ON EMBEDDED SYSTEM USING ARDUINO UNO: in association with Board of student Development, SSPU and Pan Tech Pro Ed Pune, during 4 th and 5 th JAN 2018.
09	Coordinator of “Internet of things workshop “ in association with Board of student Development, SSPU and Dolphin Labs Pune , on 21 st and 22 nd January 2019 .
10	Convener of “National conference on Teaching Learning with ICT: An Innovative Approach” organized in association with Board of Development, SSPU and, on 1st and 2 nd FEB 2019.
11	Coordinator of “Workshop on LED bulb making “, organized on 16 th September 2019.
	(ii) Contribution to Corporate Life and Management of the Institution
01	<ul style="list-style-type: none"> Assistant co-coordinator IQAC committee Actively participated in preparation of AQAR from 2009-10 till present year IQAC Coordinator from July 2018 till date.
02	<ul style="list-style-type: none"> Chairman academic calendar committee Chairman staff academy from July 2018
03	Member of exam committee: Worked as internal exam coordinator Computer science Department
04	Member of magazine committee
05	Member of Staff Academy 2017-18
	(iii) Professional Development Activities
01	Life member of SPEED. From 2010.
02	selected as member of editorial of SPEED E-news letter from year 2014

15. RESEARCH, PUBLICATIONS AND ACADEMIC CONTRIBUTIONS

Published Papers in Journals

Sr. No.	Title	Journal	ISSN/ISBN No.
01	Knowledge based consultant for power supply design	International Journal of management & systems	Vol. 14 no 3 September-December ,1998
02	Fuzzy IC voltage regulator	Journal of Shivaji university(science) KOLHAPUR	VOL 37,(2002), 51-58 (ISSN-Science-0250-5347)
03	Thick film H ₂ sensor based on nickel ferrite prepared using simple microwave oven	IEEE explore	978-1-4673 -1043-7/12/\$ 31.00 2012 IEEE
04	Al ₂ O ₃ modified ZnO composite thick film for ethanol gas sensing	IEEE explore IEEE Proceedings of the 2015 ISPTS, 8-10 March	978-1-4673 -8018-8/15/\$ 31.00 2015 IEEE
05	Hydrogen sensing characteristics of Pt-SnO ₂ nano-structured composite thin films	J. Materials Science: Materials in Electronics Springer(New York)	26, 6 (2015) pp.3707–3716 (Impact Factor- 2.019)
06	Hydrogen, ethanol and ammonia gas sensing properties of nano-structured titanium dioxide thick films	J. Materials Science: Materials in Electronics Springer(New York)	28 (2017) 9011-9016 (Impact Factor- 2.019)
07	Optical fiber based humidity sensor using Ag decorated ZnO nanorods”	international journal Microelectronic Engineering	187-188 (2018)1-5 Impact factor (1.806) ISSN: 9317
08	Gas Sensing Properties of Thick Films Prepared Using Pt Loaded TiO ₂ Nano Particles	Sensor Letter (American Scientific Publishers).	Volume 17, Number 4, April 2019, pp. 269-276(8) ISSN :1546-1971 Impact factor 0.6 DOI: https://doi.org/10.1166/sl.2019.4046

09	Solvothermally Synthesized Nickel Doped Tin Dioxide based Thick Films for H ₂ and NH ₃ Gas Sensing	ScienceDirect Materials Today: Proceedings ICMES-2018	23 (2020) 154–164 ISSN: 2214-7853 Impact factor (1.09)

Papers in Conference Proceedings

Sr. No.	Title	Details of Conference Publication	ISSN/ISBN No.
01	Thick film H ₂ sensor based on nickel ferrite prepared using simple microwave oven	IEEE proceedings of ISPTS 2012	978-1-4673-1043-7/12/\$31.00 2012 IEEE
02	Ag-ZnO 1D nanostructure NH ₃ gas sensors	Proceedings of National seminar on Green Technology	978-93-5016-319-1
03	Ni doped SnO ₂ photo-catalytic application	Proceedings of National seminar on Green Technology	978-93-5016-319-1
04	Al ₂ O ₃ modified ZnO composite thick film for ethanol gas sensing	IEEE explore- Proc. International Symposium on Physics & Technology of Sensors- ISPTS -2, 8- 10 MARCH 2015, Pune	
05	“Fiber optic humidity sensor based on Ag decorated ZnO nanorods”	proceedings of 40 th International Microelectronics And Packaging IMAPS POLAND 2016	ISBN 978-83-932464-2-7
06	Hydrogen and Ammonia Gas Sensor using Silver Loaded ZnO Nanorods” i	International Conference On Nanotechnology For Human Welfare (ICNHW-2018) during 1-3 February 2018	ISBN: 978-93-87317-98-7

08	Solvothermally Synthesized Nickel Doped Tin Dioxide based Thick Films for H ₂ and NH ₃ Gas Sensing	Proceedings of ICMES-2018	--
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Ongoing and Completed Research Projects

Sr. No	Title	Agency	Period	Status	Grant(Rs. Lakh)
01	Synthesis and Characterization Of nickel ferrite gas sensors	UGC	2Yrs	Not implemented	1.35 lakhs

Papers presented in Conferences, Seminars, Workshops, Symposia

Sr. No.	Title of the paper presented	Title of Conference / Seminar	Organized by	Whether international /National/State /Regional/College or University level
01	Thick film H ₂ sensor based on nickel ferrite prepared using simple microwave oven	ISPTS 2012	CMET& UOP	International
02	Microstructure and H ₂ gas sensing properties of SnO ₂ -Pt composite thin film	National conference on functional nano materials ,UOP	Dept. of Physics,UOP	National
03	Ag-ZnO 1D nanostructure NH ₃ gas sensors	Proceedings of National seminar on Green Technology Best paper award	978-93-5016	National
04	Ni doped SnO ₂ photo-catalytic application	National seminar on Green Technology	Sinhgad college of ASC,Pune	National
05	Al ₂ O ₃ modified ZnO composite thick film for ethanol gas sensing	International Symposium on Physics & Technology of Sensors- ISPTS -2, 8- 10 MARCH 2015, Pune	CMET & SPPU	International
06		International conference on rechargeable batteries & allied materials	CMET Pune	International

		8-10 March 2017		
07	Hydrogen and Ammonia Gas Sensor using Silver Loaded ZnO Nanorods” i	International Conference On Nanotechnology For Human Welfare (ICNHW-2018) during 1-3 February 2018	H V Desai college	International
08	Solvothermally Synthesized Nickel Doped Tin Dioxide based Thick Films for H ₂ and NH ₃ Gas Sensing	International Conference on Materials and Environmental Science (ICMES-2018), December 07- 08, 2018. Best Poster Award (Consolation Prize)	Shivaji University, Kolhapur	International
09	“Effective use of ICT in teaching electronics to computer science undergraduate program”	National Conference on “Teaching Learning with ICT : An Innovative Approach” February 01-02, 2019	Mamasahab Mohol College	International

Conferences, Seminars, Workshops, Symposia attended by faculty

Sr. No.	Title of Conference / Seminar	Duration	Organized by	Whether international /National/State /Regional/College or University level
1	International Conference On Nanotechnology For Human Welfare (ICNHW-2018)	1-3 February 2018	HVDesai college,Pune	International
2	Changing dimensions of accreditation :”A paradigm shift”	6th OCT 2017	HVDesai college,Pune	University

3	International conference on rechargeable batteries & allied materials	8-10 March 2017	CMET Pune	International
4	International symposium on physics & technology of sensors	8th to 10th MAR 2015	CMET,Pune	International
5	National seminar on Green Technology	13th and 14th FEB 2015	Sinhgad College, Pune	National
6	Indo Japan Workshop On “Nanotechnology: Synthesis And Sensing”	16th to 18th OCT 2014	CMET,Pune	International
7	Workshop on implementation of S Y B Sc(CS) Electronics syllabus	27-06-2014	St. Mira’s college	university
8	Role of IQAC in quality enhancement	5/10/2013	Bandodkar college , Thane.	State
9	National conference on functional nano materials: Synthesis characterization and Applications	31/01/2013 to 02/02/ 2013	Dept. of Physics UOP	National
10	F Y B Sc Syllabus revision workshop	01/12/2012	Fergusson College	University
11	International symposium on physics and technology of sensors	08/03/2012 to 10/03/2012	CMET & UOP	International
12	Pedagogical teaching plan of BSc(comp Sc) Syllabus	23/04/2012	Electronics Dept. UOP	University
13	Syllabus implementation	27/12/2011	Fergusson	University
	workshop of MSc SEM II	to28/12/2011	College	
14	Solar radio workshop	23/11/2011 to 25/11/2011	NCRA& Dept of ele UOP.,Pune.	International
15	Seminar on biometric based identification	07/02/2011 to 09/02/2011	Gholap College Pune	National
16	Workshop on electronic circuit design using s-lab	11/10/2010	Garware college Pune	University
17	National seminar on nano materials for devices	24/07/2010 to 26/07/2010	Physics Dept. UOP	National
18	Workshop on synthesis and characterization of glass ceramics	07/07/2010 to 10/07/2010	Yashada, Pune	International

19	Animation film production workshop	09/05/2009	IADAS,Pune.	
20	Workshop on SYBSc(CS) syllabus implementation	16/09/2009 to 17/09/2009	Garware College,Pune	University
21	Workshop on SYBSc(CS) syllabus implementation	7/12/2009 to 08/12/2009	Modern College'Pune	University
22	Symposium on advanced materials and polymers for aerospace and defense applications. SAMPADA 2008	8/12/2008 to 12/12/2008	YASHADA, Pune.	International
23	Workshop on SYBSc(CS) syllabus : presentation and feedback	3/12/2008	St.Mira's College,Pune	University
24	Implementation of choice based credit system	02/07/2019	Sinhgad College	University
25	One day workshop on new AQAR methodology	17/07/2019	HVDesai college	State
26	National seminar on Innovative and Best practices in Higher Education	26/07/2019	Modern college	National

Awards:

1. "Solvothermally Synthesized Nickel Doped Tin Dioxide based Thick Films for H₂ and NH₃ Gas Sensing "International Conference on Materials and Environmental Science (ICMES-2018), Shivaji University, Kolhapur December 07- 08, 2018.**Best Poster Award (Consolation Prize)**
2. Received **FIRST prize** in paper presentation ENTITLED "Ag-ZNO 1D nanostructure NH₃ gas sensors" at National Seminar on "Green Technology" 13th and 14th FEB 2015
3. Received Award of "**Academic Excellence**" in the college on 1st FEB 2020.