

**BIO DATA**

	<b><u>BIO DATA</u></b>	
1	<b>Name</b>	<b>Dr.(Mrs.) SHAHERA S. PATEL</b>
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3	<b>Email Address</b>	<a href="mailto:shahera9924938076@gmail.com">shahera9924938076@gmail.com</a> , <a href="mailto:shaherapatel@spuvvn.edu">shaherapatel@spuvvn.edu</a>
4	<b>Office Address</b>	Department of Electronics Sardar Patel University, Vallabh Vidyanagar.388120 Gujarat. India.
6	<b>Birth date</b>	4 <sup>th</sup> April 1970
7	<b>Gender</b>	Female
8	<b>Nationality</b>	Indian
9	<b>Educational Qualifications</b>	+ Ph.D. (ELECTRONICS)- (2005) Sardar Patel University. Vallabh Vidyanagar.  + M.SC.(ELECTRONICS)- (First Class-69.2%-1991) P.G.Department of Electronics, S.P.University,Vallabh Vidyanagar.  + B.Sc.(ELECTRONICS)-(First Class-D -76.4%-1989 ) V.P& R.P.T.P Science College, S.P.University,Vallabh Vidyanagar.
10	<b>Additional Exams Passed</b>	+ C C C Plus Exam (83 % - 2008 ) SPIPA, Ahmedabad  + Post Graduate Diploma in Value Education and Spirituality (Distance Learning), (First Class-D-86 % - 2011) Annamalai University, Madurai.  + Hindi (SL) Exam (85 Marks - 2021 ) G.S.E.Board, Gandhinagar.

11	Present Designation	Professor Department of Electronics, Sardar Patel University, Vallabh Vidyanagar. 388120 Gujarat, India.
12	Research Area	Microcontroller / IoT based Design and Development of instrumentation and control. Thin Films and Nanotechnology, Semiconductor Device Physics, Analog and Digital Circuit Design, Gas Sensing
13	Title of the Thesis	Studies on Compound Semiconductor (AgGaTe <sub>2</sub> ) Thin Film Electronic Devices.
14	Date of Appointment	+ 3 <sup>rd</sup> September 1991, USIC, Sardar Patel University, V.V. Nagar.  + Joined Department of Electronics, Sardar Patel University from 24-5-2011.
15	Merits / Achievements	<p><b>During School Career :</b> + Winner of many Prizes and Shields in different competitions like Sports, Cultural, Debate etc., Passed various examinations and participated in different programs like N.C.C., N.S.S. etc.</p> <p><b>During Graduation Career :</b> + Awarded Smt. Raiba Gokulbhai Patel Prize for securing highest number of marks in T.Y.B.Sc.(Electronics), 1989.</p> <p><b>During Post Graduation Career :</b> + Awarded Senior Fellowship by Sardar Patel University during M.Sc (Electronics) study for the academic year 1990-91.</p> <p><b>During Service Period :</b> + Winner of “<b>Hari Ohm Award</b>” for best Research Paper entitled “Design and Development of a Microprocessor Based Advanced Model for the ON-LINE Condition Monitoring of Oil immersed transformers” by D.N.Bhatt, P.G.Patel, S.C.Shah, <b>Shahera S.Patel</b>, and B.H. Brahmabhatt" in Computer Science and Computer Engineering subject in Gujarat by “ Hari Ohm Ashram Prerit Shri Bhaikaka Inter University Smarak Trust ” for the Year 1997-1998.</p> <p>+ Winner of “<b>Sardar Patel Research Award</b> ” for best Research Paper entitled “ Design and Development of Laboratory based Model of Rework System for BGA Semiconductor Devices by <b>Shahera S.Patel</b> in the subject of Basic and Computer Science by Sardar Patel University, Awarded in Annual Convocation Day : 24-1-2018</p>


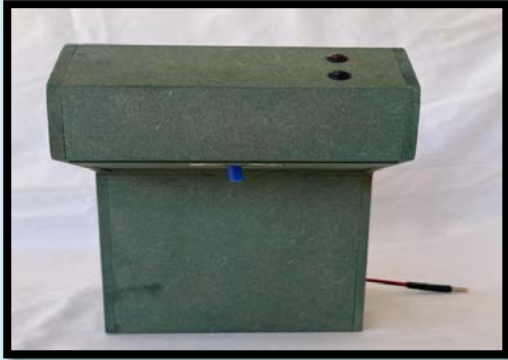


		<p>+ <b>First Prize</b> for ORAL Presentation of Research Paper entitled “Design of Digital Non Contact Thermometer” in the Category of Academia, International Science Symposium organized by Christ College, Rajkot on 23-1-2022.</p> <p>+Worked as a <b>Jury Member, NASA Space APPs</b> Challenge 2022, NASA GO Team and C.V.M.University, October 2022</p> <p>+ <b>Special Honor</b> by Sardar Patel University on teacher’s day 5-9-2022 for Approval of Patent from Patent office, Government of India.</p> <p>+ First Position for Best Paper Presentation(ORAL) Award at National Multidisciplinary Conference presented by The Assam Kaziranga University, IRA, S.S.G.Pareek College, Jaipur, November 2022</p> <p>+ <b>First Position</b> - Sardar Patel Research award, Sardar Patel University December 2022</p> <p>+ <b>Second Position</b> - Sardar Patel Research award, Sardar Patel University, December 2022</p> <p>+ <b>Second Position (Mentor : Student Category )</b>- Sardar Patel Research award, Sardar Patel University, December 2022</p> <p>+<b>Third Position</b> for Best Paper Presentation (ORAL) Award, International Conference on Multidisciplinary Research &amp; Innovations, S.S.Jain Subodh P.G.mahila Mahavidyalaya, Jaipur, February 2023</p> <p>+Worked as a <b>Jury Member, NASA Space APPs</b> Challenge 2023, NASA GO Team and C.V.M.University, October 2023</p> <p>+<b>Excellence in Innovation Award</b>, MC STEM GLOBAL Awards, USA, December 2023</p> <p>+ <b>First Position</b>, Competition for Physics Experiments (CPEx-2024), District (Cluster) Level, IAPT-RC-07 held at R.K.parikh Arts &amp; Science College, Petlad, February 2024</p> <p>+ <b>First Position</b>, State Level Final CPEx-2024, IAPT-RC-07, Charotar University of Science and Technology, Changa &amp; IAPT Gujarat, March 2024</p> <p>+ Appreciation For the Grant of patent during 2018-2024, Sardar Patel University, March 2024</p>
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		<p>+ <b>First Position</b>, Competition for Physics Experiments (CPEx-2025), District (Cluster) Level, IAPT-RC-07 held at R.K.parikh Arts &amp; Science College, Petlad, January 2025</p> <p>+ <b>First Position</b>, IAPT First Regional Annual Convention , IAPT-RC-07, held at Department of Physics, Hemchandracharya North Gujarat University, Patan, February 2025</p> <p>+ Sardar Patel Innovation Award, by Sardra Patel Startup and Entrepreneurship Council, Sardar Patel University, February 2025</p>
16	Research Projects Completed	3
17	Total Consultancy (Last 3 and 1/2 Years)	Rs.2,22,000/-

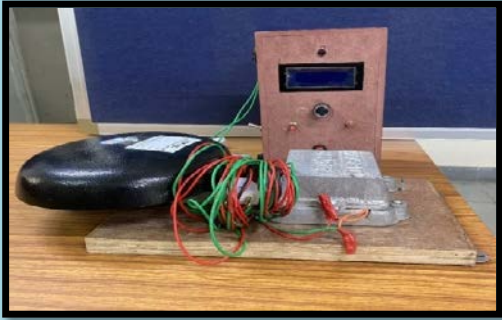

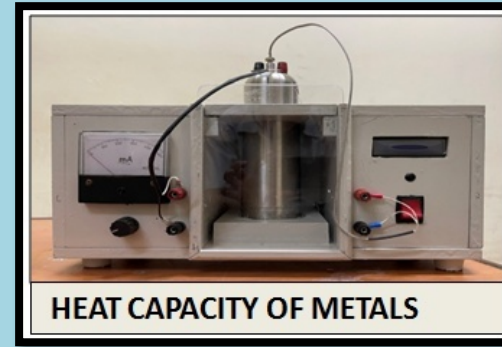


18	Patent Published	11
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Details of the Patents

Title of the Patent	Patent Filed Date(DD/MM/YYYY)	Patent Published Date/Grant ed Date (DD/MM/YYYY)	Patent Registratio n Number	Assignee/s Name (Institute Affiliation/s at time of Application)	Photo Graphs
BGA Rework Station	30/01/2017	06/09/2019	Design No. 290437	Department of Electronics, Sardar Patel University	
Non Contact Thermometer	06/05/2022	23/12/2022	Design No. 363785-001	Department of Electronics, Sardar Patel University	

Thermal Conductivity Measurement Setup (Jointly)	22/02/2023	18/05/2023	Design No. 379898-001	Jointly with Dept.of Physics, Department of Electronics, Sardar Patel University	
Multipurpose Liquid Dispenser (Jointly)	22/02/2023	27/12/2023	Design No. 379899-001	Department of Electronics, Sardar Patel University	
Multiuser Hand Sanitizer Dispensing Device (Jointly)	20-12-20123	09/02/2024	Design No. 402714-001	SSIP, Department of Electronics, Sardar Patel University	
IR Sensor Based Light Control Module	22/02/2023	29/02/2024	Design No. 379900-001	Department of Electronics, Sardar Patel University	



Electronic Bell Controller (Jointly)	08/01/2024	05/03/2024	Design No. 404071-001	Department of Electronics, Sardar Patel University	
Programmable Light Controller for Hydroponic System (Jointly)	12/01/2024	22/03/2024	Design No. 404390-001	Department of Electronics, Sardar Patel University	
Heat Capacity of Metals (Jointly)	19/09/2023	04/05/2024	Design No. 395386-001	Jointly with Dept.of Physics, Department of Electronics Sardar Patel University	 HEAT CAPACITY OF METALS
Automatic Oil Dispenser Equipment	07/12/2024	27-01-2025	Design No. 439792-001	Department of Electronics, Sardar Patel University	
IoT Enabled digital Timer Light Controller for Tissue Culture Rack (Jointly)	4/03/2025	30/6/2025	Design No. 450325-001	Department of Electronics, Sardar Patel University	

19	<b>Participation in Refresher, Orientation Courses</b>	<p>+ U.G.C Sponsored Refresher Course in " Computer Science " During 31-05-99 to 19-06-99 held at Department of Computer Science, V.V.Nagar, Gujarat, India.</p> <p>+ U.G.C. Sponsored Refresher Course in " Electronics " during 1-21 Dec., 2000 held at Department of Electronics , V.V. Nagar, Gujarat, India.</p> <p>+ U.G.C. Sponsored Refresher Course in Physics / Electronics from 24-4-2001 to 11-5-2001 Organised by Academic Staff College, Gujarat University, Ahmedabad held at Dept. of Physics, S.P.University,India.</p> <p>+ Orientation Programme Organized by the Academic Staff College, Gujarat University, Ahmedabad under the U.G.C scheme held at M.B.Patel College of Education, S .P.University V.V.Nagar, Gujarat India during 14- 5-2001 to 6-6-2001.</p> <p>+ UGC Sponsored Refresher Course in Physics during 2–21 December 2002 organised by Dept. of Physics, S.P.University.</p>
20	<b>Participation in FDP</b>	<b>10 +</b>
21	<b>Life Membership</b>	<p>+ Life member of Indian Society for Technical Education (LM /17801)</p> <p>+ Life member of Indian Physics Association (VVN/LM /10803/ USIC)</p> <p>+ Life member of Spiritual Applications Research centre (SpARC wing)</p> <p>+ Life member of Society for Materials Chemistry, India.(Member no.405)</p> <p>+ Life member of Inspira Research Association, India</p>
22	<b>Work Experience and Job Description</b>	<p><b>WORK EXPERIENCE : 34 +Years</b></p> <p><b>JOB DESCRIPTION</b></p> <p><b>ACADEMIC ACTIVITIES :</b></p> <p>+ Joined in 1991 at University Science Instrumentation Centre, Sardar Patel University for teaching in Instrumentation Course.</p> <p>In this course I was engaged with the teaching work, practical and project work of the students and also supported in technical activities of the department.</p> <p>+ At present I am working as a Professor at Post Graduate Department of Electronics and teaching in M.Sc. (Electronics) course</p>





### **TEACHING WORK :**

+ So far I have taught various papers and got wide experience and deep knowledge through teaching. The subjects I have taught so far are,

#### **(A) Post B.Sc. Diploma in Instrumentation Course :**

1. Analog and Digital circuits
2. Vacuum Instruments
3. Analytical Instruments
4. Microprocessor based instrumentation
5. Sensors and transducers
6. Computer Hardware and Maintenance
7. Practicals
8. Project Work

**(B) Guided the students of B&B Institute of Technology, V.V.Nagar for their project work as a part of Industrial Training during 2008.**

#### **(C) M.Sc.(Instrumentation) (As a Visiting Faculty) :**

1. Microprocessor based Instrumentation System Design
2. Programmable Logic Controllers
3. Practical Work
4. Guided for their Project Work

#### **(D) M.Sc.(Applied Physics) (As a Visiting faculty) :**

1. Applied Electronics

#### **(E) M.Sc.(Electronics) Course :**

1. Thin Film Technology
2. Semiconductor Science and Devices – I<sup>st</sup> Semester
3. Industrial Electronics - I<sup>st</sup> Semester
4. Electromagnetism and Antenna Theory – II<sup>nd</sup> semester
5. Principles of Control System – III<sup>rd</sup> semester
6. Practical Work (2<sup>nd</sup> Semester )
7. Project Work (3<sup>rd</sup> Semester & I<sup>st</sup> Semester)

+ During my tenure at University Science Instrumentation Centre and Department of Electronics, I have developed Different Practical / Project Module Boards and Guided the students for Various Projects as a part of Curriculum.

		<p><b><u>TECHNICAL ACTIVITIES :</u></b></p> <p>+ In addition to the academic activities I have also looked after the Repairing and Maintenance work in at University Science Instrumentation Centre, S. P. University of Analytical, Vacuum &amp; Microprocessor based process control instruments, Electronics, Personal Computer Maintenance and Fault Finding of our University as well as other Academic / Non academic Institutes.</p>
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23	<b>Additional Academic Activities</b>	<p>+ Research Papers Presented and Published in National and International Conferences / Journals / Seminars / Workshop: <b>80 +</b></p> <p>+ Worked as a Resource Person/Visiting Faculty / Convener/ Organising Committee Member/ Co-Ordinator / Programs Conducted : <b>60+</b></p> <p>+ Reviewer of International/ National Journals : <b>10 +</b></p> <p>+ Participation in Conferences / Seminar / Summer-Winter School / Symposiums / Workshops :</p> <p>* International / National - Conferences / Workshops / Symposium / Seminars: <b>75+</b></p> <p>* State / University / College level – Conferences / Workshops / Seminars : <b>110+</b></p>
24	<b>Expert Member</b>	<p>Doctoral Research / Selection Committee :</p> <p>+ Vivekananda Global University, Jaipur.</p> <p>+ Saurashtra University, Rajkot.</p> <p>+ Guru Gobind Singh Indraprasth University, New Delhi</p> <p>+</p>
25	<b>Ph.D.Thesis Evaluated</b>	6
26	<b>Book Chapter</b>	4

<b>27</b>	<b>Local Committee Member</b>	<ul style="list-style-type: none"> <li>+ College Development Committee ( CDC ), S.P.University.</li> <li>+ Exam Reform Unit, S.P.University.</li> <li>+ Convocation Day Committee, S.P.University.</li> <li>+ Board of Studies in Science (Electronics), S.P.University.</li> <li>+ Served as an Advisory Committee Member, Community Science Centre, S.P.University.</li> <li>+ Served as a Convener, Community Radio Station, S.P.University.</li> <li>+ Departmental Academic Integrity Panel, S.P.University.</li> <li>+ University Industry Interaction Cell Committee, S.P.University.</li> <li>+ Library Committee, S.P.University.</li> <li>+ Editorial Board, “PRAJNA”, S.P.University.</li> <li>+ University level Student Startup and Innovation Policy ( SSIP) : Academic Reviewer</li> <li>+ Board of Studies in Electronics Science, S.P.University</li> <li>+ Executive Committee, SPUTA, S.P.University.</li> <li>+ Flying Squad /Observer member, S.P.University.</li> <li>+ Board of Studies in V.P. Science College, V.V.Nagar</li> <li>+ Departmental Committees (DRAC, IQAC, Purchase, Women Cell,Anti-Ragging etc)</li> </ul>
<b>28</b>	<b>Participation / Volunteer in Extension &amp; Spiritual Activities</b>	<p>More than 150 (Extended services mostly Before/After Service Hours)</p>
<b>29</b>	<b>Social Activity</b>	+ Actively engaged in Social, Spiritual &Academic activities of Prajapita Brahma Kumari Ishwariya Vishwavidyalaya Centre, V.V.Nagar.

		+ Actively engaged in Social, Spiritual & Academic activities of Shree Bochasanwasi Akshar Purushottam Swaminarayan Sanstha, Anand.
<b>30</b>	<b>Development and Fabrication of Modules/Projects and Practical Demonstration Boards</b>	<ul style="list-style-type: none"> <li>+ Developed the Practicals, Microprocessor based experiments, Demonstration Projects for Post B.Sc. Diploma in Instrumentation Course.</li> <li>+ Developed and Fabricated “ Microprocessor based On - Off Temperature Controller ” for the project “ Melt Flow Indexer” of P.G. Dept. of Chemistry, Sardar Patel University, V.V.Nagar From which Chemistry department generated consultancy of more than Rs.1,00,000/-</li> <li>+ Developed and Fabricated “ Microprocessor based Frequency Meter ” for the measurement of LINE frequency.</li> </ul>

	<ul style="list-style-type: none"><li>+ Developed &amp; Fabricated Microcontroller based "Light Controller for Fountain ".</li></ul>
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	<ul style="list-style-type: none"><li>+ Designed and Developed Instrumentation based Proportional Temperature Controller which is very useful for industrial and Laboratory purpose.</li></ul>
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	<ul style="list-style-type: none"><li>+ Designed and Developed " Laboratory Based Model of BGA Rework Station"</li></ul>
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	<ul style="list-style-type: none"><li>+ Design of an Interfacing Module of Proximity Switch.</li></ul>
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	<ul style="list-style-type: none"><li>+ During COVID'19 developed jointly different Hand Sanitizer Modules.</li></ul>
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	<ul style="list-style-type: none"><li>+ During COVID'19 developed Multipurpose Digital Non Contact Thermometer.</li></ul>
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## Development and Fabrication of Modules / Projects and Practical Demonstration Boards :

