
DR VIBHA S VAISHNAV

Professor

Post Graduate Department of Electronics



Hon. Director

Anand District Community Science Centre

Sardar Patel University

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Curriculum Vitae

(1) Name :

VAISHNAV VIBHA SURYAKANT

(Surname) (Name) (Middle Name)

(2) Date of Birth :

JUNE 30, 1970

(3) Race and Religion:

Naagar – Hindu

(4) Gender:

Female

(5) Marital Status:

Unmarried

(6) Nationality and :
Mother tongue

Indian, Gujarati

(7) Present Address:

Ishavasyam
Behind Raghuvir Chambers, Off University Road
Vallabh Vidyanagar- 388120,
Dist. Anand, Gujarat State, India.
Phone ® 0091- 2692 – 237467
Mobile: 94275 47671

(8) Home Town:

Wadhwan city, Dist. Surendranagar, Gujarat

(9) Present Employment: Professor

P.G. Department of Electronics
Sardar Patel University,
Vallabh Vidyanagar- 388 120
Gujarat, India
Phone : 8469580703
e-mail: vaishnavvibha@spuvvn.edu

[10] Academic Qualifications, Experience and Contribution

1. Qualifications:

- **B.Sc.(Electronics)**, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, 1990, First class, Distinction (*Gold Medallist*)
- **M.Sc.(Electronics)**, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, 1992, First Class Distinction
- **Ph. D.(Electronics)**, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India, 2001
Title of the Thesis: Development and Applications of Indium Tin Oxide Thin Film Gas Sensors Guide: Prof. N G Patel
- **Advanced (Post Doctoral) Research** : Sri Aurobindo's Action, Sri Aurobindo Ashram, Pondicherry, India, 2011
Subject: SCIENCE AND SPIRITUALITY: under Professor Kireet Joshi
- **Certificate Course** : Dept. for Continuing Education, University of Oxford, UK
Subject: Contemporary Climate Science (18 April 2023 to 04 July, 2023 – 10 weeks))
- **Certificate Course** : H M Patel Career Development Centre (CDC), CVM, V V Nagar
Subject: **French Level -1** : 80 hours. 2008

additional courses:

Certificate/Grade/ Course	Name of the Institute	Year	Subjects	Class Division Awarded
CCC +	Dr. Babasaheb Open University, Ahmedabad	28-09-2021	CCC Plus Theory and Practical	FIRST D 80%
Hindi (Vinit)	Gujarat Vidyapeeth, Ahmedabad	08-04-2021	Hindi	FIRST 69.78%
Diploma in Music	Sardar Patel University	1989	Sitar	FIRST
B.Mus. (D to D) part -time -special provision	Sardar Patel University	1995	Sitar	FIRST D.
J-PART-I	National Cadet Corps 4 Gujarat Girls BN : VVN	1983	NCC	B

2. Experience:

Sr. No.	Name of the Institution	Designation	Period with Date		No. of Years Months	
			From	To		
1	P.G.Dept. of Electronics Sardar Patel University	Adhoc Lecturer	14-07-1992	21-03-1994	1	8
2	P.G.Dept. of Electronics Sardar Patel University	Lecturer	22-03-1994	21-03-2000	6	-
3	P.G.Dept. of Electronics Sardar Patel University	Lecturer (Senior Scale)	22-03-2000	21-03-2003	3	-
4	P.G.Dept. of Electronics Sardar Patel University	Lecturer(Selection Grade) Reader Designate	22-03-2003	21-03-2006	3	-
5	P.G.Dept. of Electronics Sardar Patel University	Associate Professor (DCAS)	22-03-2006	11-07-2016	10	3
5	P.G.Dept. of Electronics Sardar Patel University	Professor (DCAS)	12-07-2016 onwards		8	5
	Total				32	4

Additional Assignments: in Honorary capacity

Hon. Director, Anand District Community Science Centre Sponsored by Gujarat Council on Science and Technology (GUJCOST), (DST, Govt. of Gujarat)	15-03-2019 onwards 5 years, 09 months Organized 2495 events to promote Science Awareness No. of beneficiaries: 3,12,948
Hon. Director, AuroMa Academy of Education and Research, ॐ पुरि, Matar, a Branch of Sri Aurobindo Society, Puducherry	worked on the Projects: The Renaissance in India Science and Consciousness Integral Education

3. (a) Academic Contribution: Highlights

Title	Details
PG Teaching	taught 18 different courses at M.Sc. Electronics programme 01 course at M.Sc. (Defence Science) (2014) 01 Pre-Ph.D.Course (2013, 2018)
Publications	24 National/ International publications Highly Cited paper : 365 citations, h-index 9 1 book 1 Design Patent Edited 129 e-Journals/mags./e-zines/ e-publications 28 Research Presentations
Academic Foreign Visits	Germany, Poland, England, Spain, Japan, Austria
Ph.D. guidance Ph. D. Thesis evaluated	01 student 02
Research Projects	Total 09
Training Programmes	Attended: 02 UGC Refresher Course, 01 Orientation Prog.; Other courses: 13; coordinated: around 10
Talks delivers	Around 70
Workshops conducted	Around 50

3 (b) Contribution to the University: in special projects: Highlights

Title	Details
University Green Audit and related Activities Cell	Coordinator Worked to get the University an Award of International Green University at New York, 2024
Student Start up Innovation Policy: SPU SSIP Navadhara	Academic Expert (2020 onwards)
Member NAAC- AQAR, SSR (2019-22)	worked for Green Accreditation to University. The University received “Platinum Ranking” and also for getting the University an Award of International Green University at New York, 2021
Assistant Coordinator, Socio-Cultural Integration Study Centre (SCISC), 1995-98	Set up to execute a prestigious International, “Campus Diversity Initiative” project of \$50,000, sponsored by Ford Foundation, New York. Organized around 100 activities
Community Radio Station	Member, Task Force and Advisory Board, for setting up the Station (2003-4)
Member, Core Group, Celebration of 150 th Birth Anniversary of Sri Aurobindo	Sri Aurobindo Chair of Integral Studies (also worked as a Member, Advisory committee, Sri Aurobindo Tatvgnan Vyakhyanmala, Member, Integral Studies association and Coordinator, Integral Education Workshops)
Member	Committee on Azadi ka Amrit Mahotsav: Amrit Mahotsav : Yuva Sankalp shreshtha Bharat ke 5 prakalp: Environment, Cleanliness and Water Conservation

3(c) Pioneering Contribution to eminent institutions for academic excellence

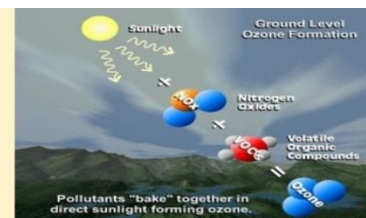
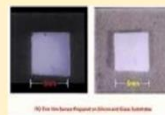
- **Member, Board of Management, C U Shah University, Wadhwan City, Gujarat (2014-2022)**
- **Member, Core Group, International Centre for Synthesis of Science and Spirituality, a project by Tapovan Open University of Yoga and Ayurveda, France**
- Was invited by the Commissioner of Higher Education, Govt. of Gujarat and CEO, Children's University (on September 15, 2011) to work as **an Honorary Consultant for Research on the theme of Science and Spirituality for the Children's University, Indian Institute of Teacher Education (IITE) and Commission for Innovations in Education.** (contributed by developing theme papers under the guidance of Prof. Kireet Joshi).
- **Worked as a member, Internal Quality Assurance Cell (IQAC), VP & RTP Science College, Vallabh Vidyanagar – (Accredited grade A by NAAC), the prestigious first college on the campus; (the foundation stone was laid by Sardar Vallabhbhai Patel)**
- **Member, Executive Committee, Gujarat Science Academy (GSA) (2023-25).**

(4) Areas of Research Activity:

- a. Semiconductor Gas/Vapor Sensor – Fabrication & Characterization
- b. Electronic Nose
- c. Integral Education
- d. Climate Action and Green Technology
- e. Electron and Consciousness
- f. Study of ISRO payloads
- g. Women Empowerment
- h. Renaissance of India
- i. Science and Spirituality

(5) Scholarly/Innovative Contribution:

(1) Teaching, Research and Development



(i) Semiconductor Vapour Sensors : VoCs

VoC citations	Device/ range	Uniqueness of the Research / Innovation	Hazard/Importance	STEL ppm
Methanol 365	ITO/Cu : RT 200 -1800 ppm	Enhancement in response: ~60 times Stimulating layer : Germany, UK	Carcinogenic, Severe health effects	250
Ethanol 175	ITO/MgO: 7323K 200-2500ppm	Enhancement in resistance: ~23 times Selectivity with stimulating layer: Poland, IIT	Responsible for generation of Bad Ozone	1000
Formaldehyde 23	Cu/ITO : RT 10-1900ppm	Enhanced speed of response ~54%, sensitivity 2.4 times : catalytic layer	and Greenhouse gases:	2
Benzene 102	Cr/ITO:483K 30ppm to 1000ppm	Enhanced selectivity w.r.t.toluene Electronic promoter	Carbon dioxide Methane and Water vapours..	2.5
Toluene 43	Cu/MnO/ITO:373K 10-1000ppm	Enhancement in sensitivity 5 times higher, speed of response, 2 layers		500

(ii) Newer Areas: Development of e- Nose:

Guided Ph.D. student for development of an e-Nose to discriminate O3 vapours with different odours

(2) Community Service : with a solution for Sustainable Development

Guided several Innovative projects to M.Sc. (Electronics) students for the benefit of community, e.g.

- For maintenance of Covid 19 protocol (Low cost automatic hand-sanitizer dispenser and social distancing cap)
- Automatic, Timer based Fogger system for animals. Parks/zoo/outdoors areas to deal with the problems of heat wave as well as air pollution
- Mentor in an SSIP Project on Blind man's Facilitator

(3) Innovative Multidisciplinary Research :

(i) Cognitive Psychology, Artificial Intelligence and Electronics Education

- (a) Taking up Cognitive analysis of students and faculty
- (b) Using Fuzzy- Nero approach to selection of e-learning material for students of Electronics based on their cognitive ability/capacity (right brain/left brain dominance)

presented Research work at an international conference on Cognitive Psychology and a symposium on metacognition at Barcelona, Spain (2016)

(ii) Synthesis of science and spirituality on the premise of Consciousness

(iii) Exploring the possibility of proving consciousness in electron

(iv) Study on Effect of Yoga-Nidra – as a tool to develop manpower with intuitive faculty like Rishi scientists

(4) e-Journals/e-magazines edited

(i) e-Journal edited

New Horizons :

Convener, Editorial Board,
with Prof. Kireet Joshi
as one of the members

A monthly e- journal of Ishavasyam Centre
of Integral Action (An independent unit of
Sri Aurobindo's Action, Pondicherry,
initiated

in the guidance of Prof, Kireet Joshi,
launched on 24th November, 2012

Total Issues Edited: 21



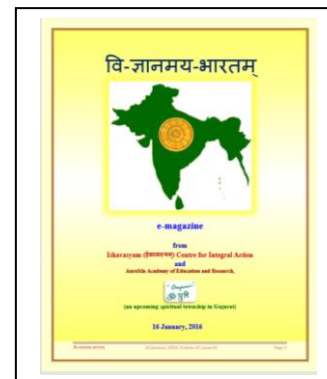
Focus: 3 Tasks for India as envisaged by Sri Aurobindo

- (a) Recovery of the old spiritual knowledge in its fullness and amplitude,
- (b) To allow the flow of that knowledge to create new forms of philosophy, science and critical knowledge, and
- (c) To deal with problems of India in an original manner in the Indian spirit and to develop a synthesis for a spiritualised society.

(ii) **e-magazine edited:**
Vi-Jnanmay Bharatam (वि-ज्ञानमय भारतं)
(bi-monthly e-magazine)

Worked as an Editor for 30 issues

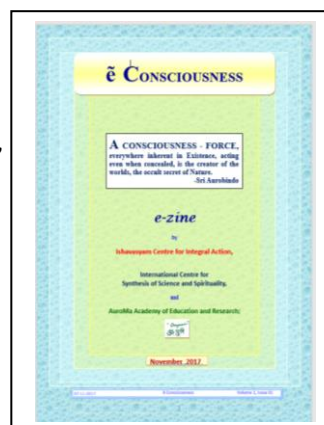
Theme: Renaissance of India



(iii) **e-zine edited:**
e-Consciousness (quarterly)

Worked as an editor – for 14 issues

Theme: Synthesis of spirit of matter,
electron and consciousness
(with Tapovan Open University of
Yoga and Ayurveda, France)



(vi) **Reports compiled:**

- (1) Sardar Patel University, Gujarat, India- Green initiatives in last 5 years - 2016-2021
- (2) Sardar Patel University,- A March towards Sustainable and Green Initiatives – Azadi ka Amrit Mahotsav Compilation

(vii) **e-Publications on Enhancing Scientific Awareness:**

Edited : 64 issues in the capacity of the Hon. Director, C C Patel Community Science Centre, Sardar Patel, University

[11] Awards/ Prizes/Honours:

During Studies:

- (1) Received [scholarship given to meritorious students](#) by the Gujarat Secondary School Examination Board, Government of Gujarat.

(2) Awarded Following **Gold Medals and prizes from V P Science College:**

(i)	Shrimati Kantaben Jayantilal Patel Gold Medal	F.Y B.Sc.- 1987-88
(ii)	Smt. Maniben Babubhai Patel Prize : Mathematics	F.Y.B.Sc.
(iii)	Shri Somabhai Vaghjibhai Patel Prize: Physics	F.Y.B.Sc.
(iv)	Smt. Raiba Gokulbhai Patel Prize: Electronics	T.Y.B.Sc.-1989-90
(v)	Smt. Lalitaben and Shri Dahyabhai Hathibhai Patel Gold Medal: First among all female students of the College	T.Y.B.Sc.
(vi)	Prin. A R Patel Gold Medal: College : overall First	T.Y.B.Sc.

(3) Received the prestigious Shri Babubhai Jashbhai Patel **Gold Medal for receiving the highest marks at B.Sc.(Electronics) examination** conducted by Sardar Patel University (Convocation, December 1990).

(4) She received **National Scholarship** for Post-Graduate study during the year 1990-91 and 1991-92 by the Ministry of Human Resource Development (Education Department), Government of India on merit basis.

During Professional Career:

1. Dr Vaishnav received **"Second Prize"** through R. Chandrashekhkar Memorial Foundation for the **best industry oriented research work** among those presented **at the two consecutive National Seminars** on Physics and Technology of Sensors during the year 1995-1996 organized by the University of Pune, Pune.
2. She received the **"Hari Om Ashram Prerit Bhaikaka Inter University Smarak Trust" prize** of the year 1995-96 in Electronics for a research paper co-authored by her.
3. **Received the Best Paper/ Presentation prize to her Paper entitled "Virtual Universities and their Role in Strengthening the Education and Studies of Electronics"** at the 17th ISTE Gujarat Convention and a Seminar on Technology Enabled Technical Education : Issues and Perspectives, held at 20th October, 2012 at Bardoli, Gujarat.
4. **'Elsevier Reviewing Recognition'** received from the Editors of 'Applied Surface Science' an outstanding International Journal from Elsevier

Felicitations in Society :

- I. Felicitated as one of the Outstanding Mother-Daughter pairs in the area having significant contribution in the Society and/or Outstanding achievement in Education/Career by the Inner wheel Anand Club, (a sister organization of Rotary

Round Town Club) organized on the occasion of International Women's Day, 8th March, 2008.

II. Honoured with 'Amrut Mahotsav Paritoshik' from a Social Organization

"Vadnagara Nagar Mandal, Mumbai (an International Institute of Vadnagara Nagar Community) on 26-02-2017

III. World Records India, received as a member of the team contributing to the "Longest Science & Innovation Expert Talk series", 24-09-2022

IV. Felicitated for the outstanding contribution in community work under the felicitation programme of Outstanding Women and Asha workers of the area by BJP Mahila Morcha: 26/05/2022

[12] Membership/Fellowship of Academic Societies/Bodies/Others

- 1) Life member, Indian Physics Association (IPA)
- 2) Life member, Indian Society for Technical Education (ISTE)
- 3) Life member, Indian Association of Physics Teachers (IAPT)
- 4) Life member, Sardar Patel University Teachers' Association (SPUTA)
- 5) Life member, Sri Aurobindo's Action, Sri Aurobindo Ashram, Pondicherry.
- 6) Member, Sri Aurobindo Society, Puducherry
- 7) Life Member, and Member, Executive Committee, Sri Aurobindo Sadhana Kendra, Vallabh Vidyanagar

[13] Research/Educational Projects undertaken/completed: Details

Sr. No.	TITLE	AGENCY	GRANT/AMOUNT MOBILIZED (Rs.)	PERIOD
On Semiconductor Sensors and Electronic Device Characterization				
1.	Fabrication of Gas Sensor and its Electronic alarm system	UGC	Rs. 11,000/= (Minor Research Project)	1994-95
2.	Fabrication of in-built miniature heater and thermocouple for thin film semiconductor gas sensor	UGC	Rs.15,000/= (Minor Research Project)	1988-89
3.	Fabrication of Electroluminescent Devices Sanction Letter No.F.14.6/97(SR-I) dt. 9-7-97	UGC, NEW DELHI	Rs.2,47,408/= (Major Research Project)	1997-2000

4.	“Development of Selective and Sensitive Gas Sensors Using Indium Oxide and Indium Tin Oxide Materials to Detect Volatile Organic Compounds (VOCs)”	UGC NEW DELHI	Rs. 8.008 lacs With Rs.50,000/- Additional grant and extension of 1 year (Major Research Project)	2004-07 + Extension of 1 year i.e. 31-03-2008
	Interdisciplinary Research work in Electronics			
5.	“Interdisciplinary Research work on Development of Gas / Vapour Sensors using the Oxide Semiconductors with possible extended study of the response of Tin Metal to Mechanical and Electrical Stimuli”	Sardar Patel Universit y under PURSE DST Project	Rs. 1 lac (Seed Money Project)	19-09-2013 to 31- 03-2014
	Special Project of setting up a Research Laboratory			
6.	Establishing a State of the art Instrumentation and Research Centre, later termed as “Sophisticated Instrumentation Centre for Advanced Research and Testing (SICART)” Worked as one of the 04 members of the Task Force	DST, New Delhi	Rs. 5,50,00,000 As an outcome of the project, SICART was funded phase wise and was officially recognized as a Western region Sophisticated Laboratory by the Department of Science and Technology (DST), Govt. of India, New Delhi.	1998-2000
	Project on e-waste management, education and leadership training, and creating audio-book for blind institute			
7.	“Pilot Project of Sardar Patel University Community Outreach and Extension Programme”	Sardar Patel Universit y Seed Money Grant	Rs. 1 lac	23/10/2013 to 31- 03-2014

	Project for Enhancing the memory capacity and well being of students			
8.	“Effects of <i>Yoga Nidra</i> on Well Being of School Children” Co-Investigator	H M Patel Centre for Medical Education and Research (Karamsa d)	No Financial Assistance was asked (All expenditure borne by P.I.)	February 21, 2017 onwards For 1 year
9.	Effect of guided meditation on Wellbeing and teaching experiences of Pre-service student teachers and their practice teaching for the same, Faculty of Education, Sardar Patel University, Vallabh Vidyanagar Co-Investigator	Bhaikaka University, Karamsa d	-	Sanctioned on 23-07-2022 1 year

[14] Refresher / Advanced courses attended:

(i) UGC sponsored Refresher / Orientation Programmes:

1. U.G.C. sponsored Refresher Course in Computer Science, organized by the Department of Computer Science, Sardar Patel University, Vallabh Vidyanagar during 22nd February, 1999 – 12th March, 1999.
2. U.G.C. sponsored Refresher Course in Electronics, organized by the Academic Staff College, Gujarat University, Ahmedabad at Department of Electronics, Sardar Patel University, Vallabh Vidyanagar during 1st December to 21st December, 2000.
3. An Orientation Programme organized by Academic Staff College, Gujarat University, Ahmedabad during 14-05-2001 to 6-6-2001 under the UGC scheme.
Presented a paper on “ Holistic Approach to Learning ” during the course

ii) Advanced Courses in the Subject / Soft Skill:

4. Training course on “C Programming” conducted by Data Pro, Bombay, Microsoft Ltd. During Nov.-Jan. 1993-94.
5. ISTE Sponsored Summer School on “Fiber Optics and its Applications” Dept. of Electronics and B.V.M. Engineering College, Vallabh Vidyanagar May 30 – June 11, 1994. (Also worked as Resource Person)
6. International School on “Advanced Electronic Materials” Crystal Growth Centre, Anna University, Madras February 6-15, 1995.
7. ISTE sponsored special Short Term Training Programme (STTP) on “ Human Values in Technical Education” Organized by B V M Engineering College, Vallabh Vidyanagar and ISTE Chapter, BVM Engineering College, Vallabh Vidyanagar, March 23-28, 2002
8. DST, New Delhi sponsored National Workshop on Solid State Sensors: Theory and Applications Organized by the Department of Electronics, Shivaji University, Kolhapur, 16 June- 28 June 2003
9. DST sponsored National Workshop on “Sensor Instrumentation” organized jointly by CGCRI, Kolkata and IIT, Kharagpur during 3 - 15 Nov., 2003
10. AICTE-ISTE sponsored One Week Short Term Training Programme (STTP) on “Advances in Neuro-Fuzzy Systems and Their Applications” Organized at A D Patel Institute of Technology, New Vallabh Vidyanagar, March 19th, 2007 to March 23, 2007
11. Certificate Course in French Level -1 (80 Hours) organized by H M Patel Career Development Centre, 2018
12. Sanskrit Sambhashan Shibir organized by Sanskrit Bharati, Anand and Sri Aurobindo Sadhana Kendra, Vallabh Vidyanagar, during 03-07-2018 to 08-08-2018
13. 3rd Faculty Development Programme (Under RUSA through KCG): Motivation for Quality and Impactful Research (Science) during 3-12-2018 to 7-12-2018
14. Lead Auditor Course on “Environment Management System, Green Campus Audit, Energy Audit and Hygiene Audit” to Educational Institutions and Industries Organized by Nature Science Foundation, an ISO 9001:2015 Certified Organization, Coimbatore, May 31st to June 4th, 2021

(iv) Faculty Development Programmes Attended

- (15) UGC sponsored Faculty Development Programme (Under RUSA through KCG) conducted by Human Resource Development Centre, Sardar Patel University, Vallabh Viodyanagar, 3-12-2018 to 7-12-2018.
- (16) NEP 2020 Orientation and Sensitization Programme of Malaviya Mission Training Programme of UGC, Organised by UGC-MMTTC, Sardar Patel University, Vallabh Vidyanagar, 2-9-24 to 13-9-24, grade A+.

[15] Details of Research work Published/Presented:

[a] Research Papers published:

	Research Papers Published in Journals			
	Title	Cited by	Year	Journal Indexing Status: Present
1.	Indium tin oxide (ITO) thin film gas sensor for detection of methanol at room temperature NG Patel, PD Patel, VS Vaishnav Sensors and Actuators B: Chemical 96 (1-2), 180-189	365	2003	UGC listed IF:7.460 Cite score:15.0
2.	Indium Tin Oxide thin film gas sensors for detection of ethanol vapours VS Vaishnav, PD Patel, NG Patel Thin solid films 490 (1), 94-100	175	2005	UGC listed IF:2.183 Cite score:4.3
3.	Preparation and characterization of indium tin oxide thin films for their application as gas sensors VS Vaishnav, PD Patel, NG Patel Thin Solid Films 487 (1-2), 277-282	95	2005	UGC listed IF:2.183 Cite score:4.3
4.	Development of ITO thin film sensor for detection of benzene VS Vaishnav, SG Patel, JN Panchal Sensors and Actuators B: Chemical 206, 381-388	102	2015	UGC listed IF:7.460 Cite score:15.0
5.	Fabrication of carbon tetrachloride gas sensors using indium tin oxide thin films NG Patel, KK Makhija, CJ Panchal, DB Dave, VS Vaishnav Sensors and Actuators B: Chemical 23 (1), 49-53	65	1995	UGC listed IF:7.460 Cite score:15.0
6.	Indium tin oxide thin-film sensor for detection of volatile organic compounds (VOCs) VS Vaishnav, P D Patel, N G Patel Materials and Manufacturing Processes 21 (3), 257-261	51	2006	UGC listed IF:4.616 Cite score:6.7
7.	Development of indium tin oxide thin film toluene sensor VS Vaishnav, SG Patel, JN Panchal Sensors and Actuators B: Chemical 210, 165-172	43	2015	UGC listed IF:7.460 Cite score: 15.0

Research Papers Published in Journals				
	Title	Cited by	Year	Journal Indexing Status: Present
8.	Development of ITO thin film sensor for the detection of formaldehyde at room temperature VS Vaishnav, SG Patel, JN Panchal Sensors and Actuators B: Chemical 202, 1002-1009	23	2014	UGC listed IF:7.460 Cite score: 15.0
9.	Detection and classification of volatile organic compounds using Indium Tin Oxide sensor array and artificial neural network HJ Pandya, VS Vaishnav International journal of intelligent systems technologies and applications, 7-1,72-79, 7-4, 1	6	2009	UGC listed IF: 1.194 Citations Score: 1.2
10.	Fabrication and Application of Thin Film Semiconductor Sensors for the detection of Volatile Organic Compounds VSVaishnav S G Patel JN Panchal Advanced Materials Research 665, 85-92	4	2013	UGC listed
11.	Room Temperature Detection of Benzene Vapours by Tin Oxide Nano Clusters J N Panchal, S G Patel, V S Vaishnav Sensors and Transducers Journal 190 (7), 35-39	2	2015	UGC listed IF:0.115
12.	Semiconductor Gas Sensors- An overview N G Patel, K K Makhija, V S Vaishnav Journal of Engineering and Technology, Sardar Patel University, March 2001, 47-54		2001	Peer Reviewed
13.	An Approach to the Pursuit of Supramental or Integral Knowledge Kireet, Joshi, and Vibha Vaishnav Sri Aurobindo's Action 42 (8), 10-12		2011	Peer Reviewed
14.	Combination of Science and Spirituality: Meaning Kireet Joshi and Vibha Vaishnav The Advent, 69-3, August, 2012, 19-29		2012	Peer Reviewed
15.	Consciousness & Evolution Vibha Vaishnav & Kireet Joshi Journal of Consciousness Exploration & Research 5 (8)		2014	Peer Reviewed
16.	A Novel Three Tier Education and Leadership Training Programme for National Resurgence Vaishnav Vibha Sathaye Swati, Raithatha Shyamsunder, Padh		2016	Peer Reviewed

	Research Papers Published in Journals			
	Title	Cited by	Year	Journal Indexing Status: Present
	Harish University News 54 (22), 3-9			
17.	Education for New India: Insights from Gandhian teachings Vibha Vaishnav University News 57 (39)		2019	Peer Reviewed
18.	Effects of Yoga-nidra on Adolescents Well-being: A Mixed Method Study Jagdish R. Varma Bhale du S. Vaishnav, Smruti B. Vaishnav, Vibha S. Vaishnav International Journal of Yoga 11 (3), 245-248	29	2018	UGC listed
19.	Transformative effects of yoga nidra on hedonic and eudemonic dimensions of well-being: A qualitative study in trainee teachers Bhalendu Suryakant Vaishnav, Smruti Bhalendu Vaishnav, Vibha Suryakant Vaishnav, Neepta D Bharucha, Jagdish R Varma International Journal of Yoga-Philosophy, Psychology and Parapsychology 7,1,17	6	2019	Peer Reviewed
20.	Effects of yoganidra on well-being of trainee teachers Dr. Bhalendu S Vaishnav, Dr. Neepta D Bharucha, Dr Smruti B Vaishnav, Dr. Vibha S Vaishnav, Dr. Jagdish R Varma Journal of Health Sciences and professions Education 1 (1), 1-6		2021	Peer Reviewed

	Research Papers Published in Proceedings	Year	National/ International
21.	Fabrication of gas sensors using Indium tin oxide thin films N.G.Patel, K.K.Makhija & V.S.Vaishnav National Seminar on Physics & Technology of Sensors, Pune, Feb. 1-3, 1995, Proceedings : Sensors - 2 pp C 17-1	1995	N
22.	Fabrication of Hydrogen Sulphide gas sensor using Indium tin oxide thin films and its electronic alarm system N.G.Patel, K.K.Makhija & V.S.Vaishnav	1996	I

	“Semiconductor Devices” - Narosa Publishing House 1996 pp 439		
23.	Preparation of Indium tin oxide thin film gas sensors for autoexhaust gases N.G.Patel. K.K.Makhija, V.S.Vaishnav & S.S.Patel National Seminar on Physics & Technology of Sensors, Pune, Feb. 1-3, 1996, Proceedings : Sensors - 3 pp C 34 –1	1996	N
24.	Autonomy and accountability in technical education : Role and responsibility of stakeholders Dr.V.S. Vaishnav and Dr.S.V.Vaishnav Proceedings, 38 th ISTE National Annual Convention, Kalinga Institute of Industrial Technology, Bhubaneswar, Dec. 19-21, 2008	2008	N
25.	Virtual Universities and their Role in Strengthening the Education and Studies of Electronics Vaishnav Vibha S Proceedings, 17th ISTE Gujarat Convention and a Seminar on Technology Enabled Technical Education : Issues and Perspectives, held at 20th October, 2012 at Bardoli, Gujarat.	2012	S

[b] Books Published/ Journals Edited/Compiled

(i) Book in the Value Oriented Education Series:

(Introductory Articles followed by Compilation)

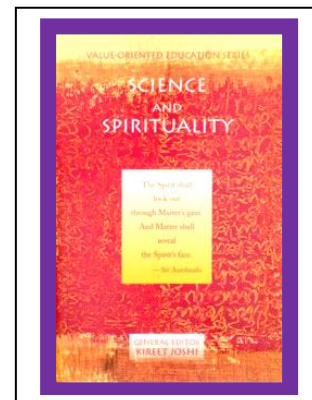
Science and Spirituality (A Monograph)

Author: Vibha, Vaishnav

Editor: Kireet Joshi

No. of Pages:235, First Edition, 2011,

Shubhraketu Foundation and Mother's Institute of Research, New Delhi,
printed at Auroville



(ii) Thesis / Comprehensive volume

Comprehensive Thesis of Advanced (Post Doctoral) Research on Science and Spirituality

Sri Aurobindo's Action, Sri Aurobindo's Ashram, Pondicherry and Sardar Patel University, 2011

Researcher: Dr. Vibha Vaishnav, Guide: Prof. Kireet Joshi

[c] Creative Articles published:

1.	<p>“Impressions for Spiritual Exploration – A bow to Einstein” Vibha Vaishnav A Research Article published in Education Times (Baroda) Supplement of the Times of India News Paper, Ahmedabad Edition, March 21, 2005.</p>
2.	<p>“The Greatest Event of the World” Vibha Vaishnav In a Book, a Special publication by Sri Aurobindo Society, (recognized as a Research Institute and an Institute of National Importance by Govt. of India) Gujarat State Committee, Vadodara, 2014, 128-136</p>
3.	<p>“Kena Upanishad and Modern Science” Vibha Vaishnav New Horizons, e- Journal, Volume 1, Issue 5, pg.18-19, 2013</p>
4.	<p>“Vedanta” Vibha Vaishnav New Horizons, e-journal - Volume 1, Issue 7, Pg.11, 2013</p>
5.	<p>“Meeting of Science and Spirituality” Dr.Vibha Vaishnav New Horizons, e-journal – 2013, Volume 1, Issue 1, 24 November, 2012 Pg.11-13</p>
6.	<p>“Science and Spirituality” Vibha Vaishnav New Horizons, e-Journal, Volume 1, issue 3, pg.17, 2013</p>
7.	<p>“Concept and Phenomena of Consciousness” Vibha Vaishnav, Kireet Joshi New Horizons, e-journal, Volume 2, Issue 2 Pg.6-8, 2013</p>
8.	<p>“Science and the Highest Welfare of Society” Vibha Vaishnav, Kireet Joshi New Horizons, e-Journal, Volume 2, Issue 3, Pg.24-30, 2014</p>
9.	<p>“On Consciousness” Kireet Joshi and Vibha Vaishnav Consciousness, Volume 2, Issue 05, 24-11-2018, a quarterly e-zine Tapovan Open University of Yoga and Ayurveda, France</p>
10.	<p>“Gas Sensing: The Need and Importance” Dr. Vibha S. Vaishnav, A series of e-publications on Enhancing Scientific Awareness : 6. World Environment Day, 05-06-2019</p>

	C C Patel Community Science Centre, (GUJCOST, DST, Gov of Gujarat) Sardar Patel University
11.	Initiated a Research column " <i>Gujarat Darpan: pragati ane padkaro</i> " in which Prepared and Compiled 3 short articles in the issues of 01-05-2003,15-07-2003, 15-09-2003, Edited 5 short articles. Sheel Shrutam, The Sardar Patel University Newsletter

[d] Research presentations at Seminars/ Conferences etc.:

1. Preparation of Indium tin oxide thin film gas sensors for autoexhaust gases.
N.G.Patel. K.K.Makhija, V.S.Vaishnav & S.S.Patel
National Seminar on Physics & Technology of Sensors, Pune, Feb. 1-3, 1996
Proceedings : Sensors - 3 pp C 34 –1
2. Growth and Application of ITO thin film devices
N. G. Patel, K.K.Makhija, Basumati Patel & Vibha Vaishnav
National Conference on Advances in Condensed Matter Physics, Pondicherry,
February 26-28, 1998.
3. Need to rejuvenate the Technical Education to establish sustainable development
V.S.Vaishnav and S.V.Vaishnav
One day state level seminar on Role of Technical Education for Sustainable Development
organized by Indian Society for Technical Education (ISTE) Gujarat Section and A D Patel
Institute of Technology, New Vallabh Vidyanagar on Oct. 13, 2002.
4. Indium Tin Oxide thin film sensor for detection of volatile organic compounds (VOCs)
Pandya, H.J. , Vaishnav, V.S., Patel, P.D. Patel, N.G.
International Symposium on Advanced Materials and Processing ISAMAP-2K4, IIT
Kharagpur,
India, December 6-8, 2004, Proceedings, Vol. II, 941-948
5. Preparation and Characterization of Indium Tin Oxide Thin Films for their Application as
Gas Sensors
V S Vaishnav, P D Patel, N G Patel
8th International Conference on Polycrystalline Semiconductors-Materials, Technologies,
Device Applications, organized by the University of Potsdam, Germany, 2004
6. Indium tin oxide thin film gas sensors for detection of ethanol vapours
V.S.Vaishnav, P.D.Patel, N.G.Patel
4th International Workshop on Semiconductor Gas Sensors\ (SGS 2004), 2004, organized
by the
Dept. of Microelectronics, Silesian University of Technology, Gliwice, Poland

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7. Semiconducting Oxide thin film gas sensors for detection of Volatile Organic Compounds (VOCs), a study and a review
V.S.Vaishnav*, S.G.Patel, J.N.Panchal
Presented at the 111th GSA-VVN CSC ANNUAL SCIENCE MEET 'SCI-MEET 2008', organized under the Joint Auspices of GSA-VVN Chapter & C. C. Patel Community Science Centre Sardar Patel University Vallabh Vidyanagar, Anand, Gujarat, India, on February 17, 2008.
 8. Oxide Semiconductor based Vapour Sensors with High Stability for the Detection of Carbon Tetrachloride (CCl₄)
V.S.Vaishnav*, S.G.Patel, J.N.Panchal
Presented at a Two Day Symposium on "Innovations in Science" and SPU Research Scholars Meet (ISSPURSM -2012) 8th -9th January 2012, Organized by Sardar Patel University Vallabh Vidyanagar, Anand, Gujarat, India.
 9. Fabrication & Application of Thin Film Semiconductor Sensors for the Detection of VOCs
V.S.Vaishnav*, S.G.Patel, J. N. Panchal
3rd National Conference on Condensed Matter and Materials Physics (CMMP-2012) , Organized by the Department of Physics & Physics Alumni Association Sardar Patel University Vallabh Vidyanagar, Anand, Gujarat, India on March 3-5th , 2012.
 10. Flexible Electronics: A demanding, desirable breakthrough in Sensor Technology: A Review
V.S.Vaishnav*, S.G.Patel, J.N.Panchal
State level Seminar on "Current Trends in Research and Applications of Physical Science in Gujarat (CTRAPSG-12)" organized on 29th December 2012, Department of Physics, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India. (Poster)
 11. Study of Sensitivity and Selectivity of Thin Film Semiconductor Sensors for the Detection of Volatile Organic Compounds
V.S.Vaishnav*, S.G.Patel, J.N.Panchal
Presented a Poster at a State Level Seminar on "Current Trends in Research and Applications of Physical Science in Gujarat (CTRAPSG-12)", Organized on 29th December 2012 at the Department of Physics, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India. (Poster)
 12. Semiconductor Vapour Sensor to Detect Explosives
V.S. Vaishnav, S.G. Patel, J.N.Panchal
DST PURSE Programme sponsored National Conference on Interdisciplinary Perspectives: Defence Studies, Earth System Science and BioMedical Science (IPDEB – 2013), organized at Sardar Patel University, Vallabh Vidyanagar, November 15-17, 2013 (poster)

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13. Detection of a primary greenhouse gas by oxide semiconductor thin films with special study of the effect of the nature of substrate on its performance
N.G.Patel and V.S.Vaishnav
National Seminar on Crystallography (NSC 43 B) And National Workshop on CADD (Sept.1-3, 2014) , Department of Physics, Sardar Patel University (poster)
 14. A demanding change in the approach of science in 21st century (paper)
V.S.Vaishnav
National Seminar on “Change of Consciousness in 21st Century (in the light of Sri Aurobindo) Organized by Sri Aurobindo Chair of Integral Studies, S.P. University, Vallabh Vidyanagar
March 22-24, 2001.
 15. $E = MC^2$, Scientific basis of various Health Systems (poster)
B.S.Vaishnav and V.S. Vaishnav
Annual Conference of Association of Physicians of India, APICON (66th Annual Conference), Ahmedabad
January 6-9, 2010,
 16. Transformation – A Collaborative Evolutionary Process : Introduction and Glimpses
V.S.Vaishnav
International Conference on “Mutation II - A Clearing”
Sri Aurobindo Centre for Studies - India and the World, Bharat Nivas, Auroville.
February 25-27, 2011
 17. Quantum Inspired Fuzzy Neuro Approach: An Application of Cognitive Science for better comprehension of Cognitive Psychology
Vibha S Vaishnav (Oral)
Cognitive Psychology Section Annual Conference 2016 The British Psychological Society, Barcelona, Spain, 2-9-2016
 18. Cognitive Psychology: An Integral Perspective
Vibha S Vaishnav (Oral)
Cognitive Psychology Section Annual Conference 2016 The British Psychological Society, Barcelona, Spain, 2-9-2016
 19. Application of Electronics for maintenance of Covid-19 Care protocols
Vibha S Vaishnav, Monarth Patel , Chandni Sargara, Anuj Patel, Mayank Machhi, Nirmal Soni
Online Programme on Experiments and Demo in Physics, Electronics and Computational Physics, IAPT – RC07, Department of Physics, Saurashtra University, Rajkot, June 24, 2021
 20. An Automatic cooling system for Animals to fight with heatwave in Summer (Poster)
Dr. Vibha S Vaishnav, Ms. Sonal Solanki, Ms. Chandni Marwadi

Bharatiya Vigyan Sammelan – Agricultural Sciences – BVS 2023 - National Conference as a part of Vibrant Gujarat, 21-23 December, 2023

21. Comparison of various systems of Yoga and Framework of the Integral Yoga (Poster)
Vibha S Vaishnav, Dr. Mrs. Smruti B Vaishnav, Dr. Bhalendu S Vaishnav
Bharatiya Vigyan Sammelan – Indian Knowledge System – BVS 2023 - National Conference as a part of Vibrant Gujarat, 21-23 December, 2023
22. Green practices for Sustainable Development at Sardar Patel University, India and proposed Inclusive Climate Action Programmes (Poster)
Dr. Vibha S Vaishnav
6th Global Summit of Research Institutes for Disaster Risk Reduction (GADRI)
Organized by University of Kyoto, Japan during 15 to 17 March, 2023
23. Inclusive Climate Action Programme at Sardar Patel University, India (Poster)
Dr. Vibha S Vaishnav
6th Global Summit of Research Institutes for Disaster Risk Reduction (GADRI)
Organized by University of Kyoto, Japan during 15 to 17 March, 2023
24. ALL Inclusive Initiatives of “Green & Sustainable Development” - as a step towards attaining the behavioural change – to diminish & prevent the risk of Disasters - *a case study of Sardar Patel University and Anand District Community Science Centre, India*
Dr. Vibha S Vaishnav
6th Global Summit of Research Institutes for Disaster Risk Reduction (GADRI)
Organized by University of Kyoto, Japan during 15 to 17 March, 2023
25. Instruments used in Chandrayaan 3 and preliminary study of the outcome of the Measurements (Poster)
Ms. Sonal Solanki, Ms. Chandni Marwadi and Dr. Vibha S Vaishnav
National Seminar on Opportunities in Physical Sciences and Multidisciplinary Research for Sustainable Development” held on 12th March, 2024
26. Design Of Smart Multiparameter Control System For A Greenhouse (oral)
Ms. Chandni Marwadi, Ms. Sonal Solanki and Dr. Vibha S Vaishnav
National Seminar on Opportunities in Physical Sciences and Multidisciplinary Research for Sustainable Development” held on 12th March, 2024
27. Electronic Nose: Concept And Applications (Oral)
Dr. Vibha S Vaishnav (oral)
National Seminar on Opportunities in Physical Sciences and Multidisciplinary Research for Sustainable Development” held on 12th March, 2024
28. Wave-Particle duality, Consciousness and Health” (Poster).
Dr Vibha Suryakant Vaishnav, Dr. Suryakant V. Vaishnav, Dr. Bhalendu S. Vaishnav

9th European Conference on Religion, Spirituality and Health Paracelsus Medical University, Salzburg, Austria and the Research Institute for Spirituality and Health, Switzerland , May 16-18, 2024,

[16] Talks/ Lectures Delivered : around 70 on varied topics

Highlights of some of the Representative Talks:

 <p>@ ADIT Engineering College</p>	 <p>@ IIT Kharagpur</p>	 <p>@ Barcelona, Spain</p>
 <p>@ Eco-Club Training Programme</p>	 <p>@ Orissa</p>	 <p>@ Waymade Education College</p>
 <p>@ Carrier Develoment Centre</p>	 <p>@ N V Patel Science College</p>	 <p>@ Bangalore</p>
 <p>@ Auroville, Tamil Nadu</p>	 <p>@ Study Circle</p>	 <p>@ GCET Engineering College</p>

[17] Conducted training Programmes/Workshops/Seminars: around 50

[18] Foreign Trips for Academic purpose:

- (1) The University of Potsdam, [Germany](#) during September 5-10, 2004
- (2) The Open University, Milton Keynes, [UK](#) – September 15-17, 2004
- (3) Ustron, [Poland](#) – September 19-23, 2004
- (4) Barcelona, [Spain](#), September, 2016
- (5) Kyoto, Japan, [March](#), 2023
- (6) Salzburg, [Austria](#), May, 2024

[19] Patent:



Vision:

“All Life is Yoga with an ascending movement for manifestation of The Supramental Consciousness upon the Earth”

She views all activities of life as potential means of manifesting the concealed Divinity.

Mission:

To provide a platform and milieu for the transformation of human nature into Divine and facilitate the Change of Consciousness in every sphere of life.

Aim:

To become a humble and abiding instrument in the service of Sri Aurobindo and The Mother, the torchbearers and forerunners of the Supramental transformation of humanity.

She aspires to work for the **Renaissance in India in the light of Sri Aurobindo and The Mother.**

Date: December 16, 2024

Place: Vallabh Vidyanagar