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Personal Information	Date of Birth: 14-09-1972 Born in Rajkot(Gujarat) – India
Present Occupation	Professor & Head, Department of Physics, Saurashtra University, Rajkot Teaching Experience: **24 Years (from 11-05-2000)**
Present Responsibilities	▪ Head, Department of Physics, Saurashtra University, Rajkot ▪ Coordinator, CCDC & CCC, Saurashtra University, Rajkot ▪ Coordinator, JIO-UPSC Training Centre,Saurashtra University, Rajkot ▪ Coordinator, Center for Excellence: Nanotechnology, SU, Rajkot ▪ Member Board of Study Dept. of Electronics, SU, Rajkot ▪ Member, IQAC, Parul University, Vadodara ▪ Coordinator, UGC-DRS Phase III (121 Lacs Project) ▪ Coordinator, DST FIST Level II (195 Lacs Project) ▪ Member of Board of Study Physics, Parul University, Vadodara ▪ Vice President, Saurashtra University Saikshik Sangh, Rajkot ▪ Ex Director (incharge), UGC-MMTTC Saurashtra University
Member in **Editorial Board**	▪ International Journal of Nano Science and Technology ▪ ISSN: 2328-5443 ▪ International Journal of Science and Advanced Technology (IJSAT) ▪ Journal of Electronics and Communication Engineering (JECE) ▪ International Journal of Electronics and Communication Engineering ▪ (IJECE) ISSN(Print): 2278-9901 ; ISSN(Online): 2278-991X ▪ Scientific Board of Computer, Electrical & Electronic Engineers, International Institute of Engineers (www.iieng.org)
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Educational qualifications	▪ **B. Sc (Physics)** Saurashtra University, Rajkot (1990-1993) First class (62%) ▪ **M. Sc (Physics with Electronics)** Saurashtra University, Rajkot (1993-1995) First class (69%) ▪ **Ph.D.** Saurashtra University, Rajkot (Degree awarded inJanuary1999) Title of the thesis, "Studies on substituted Oxide Superconductors" ▪ **P.G.Diploma in Information Technology** Saurashtra University, Rajkot (2000)
Research Interest	Studying structure-property relationship in novel materials and devices using x-ray diffraction, magnetic, transport and thermal measurements. Some systems of interest are: ➢ **Nanomaterials, Thin films and Composites** ➢ **High temperature cuprite superconductors (HTSC)** ➢ **Multiferroic and DMS** ➢ **Perovskitemanganites (CMR materials) and related compounds.** ➢ **Nano Core-shell, Nanocomposites and Carbon Nanotube (CNT)**
Awards received	▪ First Prize for best paper presented in an International Workshop on "High Temp. *Superconductivity - Ten Years a*fter Its Discovery" held at University of Rajasthan, Jaipur (1996). ▪ International Crystallography Union Young Scientist Award for attending International School on Powder Diffraction Techniques held at Jadhavpur University, Calcutta (1998) ▪ First Prize won in Paper presentation at National seminar on "EMERGING TECHNOLOGY & APPLICATION, 1-2 October 2006 held at Department of Computer Science, SaurashtraUniversity, Rajkot ▪ Prof. DolarraiMakad Award for Excellence in Research (Electronics) for 2011-12. ▪ Felicitation by Commissioner of Higher Education, Gujarat for academic excellence in Higher Education on 21st Feb.2013 at SU ▪ Prof. DolarraiMakad Award for Excellence in Research (Physics) for 2015-16. ▪ Smt. R. D. Gardi "Dikra Nu Ghar – Vrudhaashram" Dholra Award Received, Rajkot **(2016)** ▪ Junior Chamber International (JCI) Platinum felicitated as Supreme Teacher Award 2019 on 5th Sept.2019 at Kansagara College, Rajkot ▪ International Centre for Diffraction Data (ICDD) contribution of 1 pattern to the powder diffraction file – Release 2020 ▪ Nation Builder's Award by Rotary Club Rajkot on 4th September 2024

Research Projects	Minor/Major **10** Research projects completed funded by UGC/GUJCOST **Six** Projects are ongoing funded by UGC/DST/IUAC **Patents**:1. Carbon Nano-Dot Based Lycopericum Solar Cell (First time in history of SU-Physics) 2. Superabsorbent Polymers for soil conditioning 3. Super hydrophobic coating liquid composition 4. A novel process of preparing alumina powder 5. A multipurpose cryostat probe for measuring electrical properties
Research Guidance **Research experience**	**Degree Awarded: 16 Students** **Ph.D. awarded one from Computer Engineering, one from Electronics & Communication and one from Computer Science Field.** **Working: 07 Students (Physics-Subject)** Project Assistant Under Bhabha Atomic Research Center (IUC-DAEF) Project at Department of Physics, Saurashtra University, Rajkot (India) Neutron Diffraction Studies on High Temperature Super conductors Research Experience: 29 Years (from 1995 to till date)
Publications	▪ Over **144** research publications in peer reviewed journals and conference proceedings ▪ About **14** Books Published under UGC unassigned Grant ▪ About **5** Technical Articles published in Magazines of Electronics Field ▪ Over **56** International/National Seminar/Workshop attended and presented research paper in research field
Extension Activities	▪ Member of Board of Study Electronics, Dr. B.A. Marathawada University, Aurangabad ▪ Member of Board of Study Electronics, Saurashtra University, Rajkot ▪ Working as an observer National Institute of Electronics and Information Technology, Govt. of India for DOAEEC Examination ▪ Worked as a coordinator, Gujarat State Eligibility Test (GSLET) conducted by MS University, Vadodara ▪ Worked as a Superintendent/Deputy Superintendent National Eligibility Test (NET) since last three years conducted by UGC, New Delhi ▪ Worked as Member of Saurashtra University Center Admission Committee (SUCAB) ▪ Worked as a Coordinator, Ph.D. Eligibility Test 2013 (PET) conducted by SUCAB ▪ Founder President of Saurashtra University Researchers Association (SURA) ▪ Active member of KCG, Gujarat State from Saurashtra University representative ▪ Academic Member of RUSA Committee, SU ▪ Committee Member in Publication Department, Saurashtra University for Diary, Calendar, Annual Report etc.

	▪ Worked as an Asst. Coordinator in IGNOU ▪ IGNOU counselor to share knowledge. ▪ Resource Person in UGC:HRDC, Saurashtra University and Gujarat University ▪ Life Member of Photonic Society, Cochin ▪ Member of Indian Science Congress, Calcutta ▪ Worked as a President of Information Society of Saurashtra and Society of Computer Hardware ▪ Worked as a Committee Member in various University's extension activities. ▪ Worked as a Technical Advisor in I.T. colleges, Gujarat ▪ NAAC Department Coordinator (From 25th Oct.2005 to 13 June 2014) for Quality enhancement work. ▪ Coordinator in orientation Programmes and refresher courses organized by UGC: HRDC, Saurashtra University, Rajkot ▪ Ex. General Secretary & JCC Member, Saurashtra University Teacher's Association (SUTA) ▪ Ex. Member, IQAC, Saurashtra University, Rajkot
Organize Seminar/ Workshop/ School	Worked as Committee Member/Coordinator/Organizer in **35** National/State level events

List of Publications (International Journals):

1. VR Rathod, Mukesh Tiwari, Mehul Parmar, Himitri Trivedi, Apexa Maru, NA Chondagar, Rujuta Lehru, Jaydeep Radhanpura, VS Vadgama, Himanshu Dadhich, RJ Gohel, Puneet Negi, PP Bardapurkar, NP Barde, MJ Keshvani, YN Jani, NA Shah, PS Solanki; Investigations on electrical and sensing behaviors of Fe doped ZnO nanoparticles; Nano-Structures & Nano-Objects; 40 (2024) 101356
2. Keval Gadani, Faizal Mirza, Davit Dhruv, AD Joshi, K Asokan, PS Solanki, **NA Shah**; Thickness dependent structural and electrical properties of pulsed laser deposited Y0.95Ca0.05MnO3 thin films and the effect of high energy oxygen ion irradiation; Applied Physics A, 130 (2024) 716
3. IG Jhala, Apexa Maru, Laxmi Hathiya, Harshal B Desai, NA Shah, PS Solanki, Ashish R Tanna, HH Joshi; Structural, magnetic and electrical properties of gadolinium doped cobalt ferrite nanoparticles: Role of Gd doping level; Nano-Structures & Nano-Objects 40 (2024) 101327
4. Manan Gal, Mayur Parmar, Payal Joshi, Sangita Chavda, CM Panchasara, Neeta A Bhammar, PS Solanki, Davit Dhruv, AD Joshi, **NA Shah**, Electrical and surface properties of chemically deposited SrTiO3 films on ITO/glass substrate, Chemical Physics 585 (2024) 112363
5. Nisarg Raval, Bharavi Hirpara, CM Panchasara, Bhargav Rajyaguru, MR Gonal, Davit Dhruv, AD Joshi, PS Solanki, **NA Shah**, Investigations on structural and electrical properties of YMnO3 based mixed valent manganites, Chemical Physics Letters, 849 (2024) 141411

6. Akram Krichene, Wahiba Boujelben, Kunal N Rathod, Keval Gadani, Chi–Liang Chen, Asokan Kandasami, **NA Shah**, Piyush S Solanki, Electronic structure and room temperature colossal magnetodielectric effect in La0.4Dy0.1Ca0.5MnO3 manganite, Journal of Alloys and Compounds, 999 (2024) 175022
7. Gagandeep Kaur, Puneet Negi, Ruhit Jyoti Konwar, Hemaunt Kumar, Nisha Devi, Yogita Verma, Anchal Sharma, Gursimran Kaur, Prakash Chandra Sati, Himanshu Dadhich, Apexa Maru, IG Jhala, **NA Shah**, PS Solanki, Structural, optical, and electrical characteristics of anatase titanium dioxide tailored by doping of nitrogen and copper ions Ceramics International, 50 (2024) 27710-27720
8. Keval Gadani, Faizal Mirza, Davit Dhruv, K Asokan, PS Solanki, **NA Shah**, AD Joshi, Charge transport studies on pulsed laser deposited grown manganite based thin film device, Applied Physics A, 130 (2024) 278
9. Bhargav Rajyaguru, Keval Gadani, Himanshu Dadhich, Davit Dhruv, V Ganesan, K Asokan, **NA Shah**, PS Solanki, Influence of swift heavy ion irradiation on charge transport and conduction mechanisms across the interface of LaMnO3 and La0. 7Ca0. 3MnO3 manganites, Ceramics International, 50 (2024) 16615-16638
10. Hardik Gohil, Keval Gadani, Hetal Boricha, Bhargav Rajyaguru, Himanshu Dadhich, Nisarg Raval, Davit Dhruv, VR Rathod, NP Barde, PP Bardapurkar, RJ Gohel, K Asokan, **NA Shah**, PS Solanki, Sensing characteristics and EPIR Studies on composite manganites: Role of nanoparticles in the micronsized matrix lattice, Materials Research Bulletin, 173 (2024) 112680
11. Prachi Desai, Vaishnavi Darji, MP Deshpande, SH Chaki, Pinkesh G Sutariya, Heni Soni, PS Solanki, **NA Shah**, Bharavi Hirpara, Dielectric performance of nanostructured magnesium oxide and effect of cobalt substitution, Materials Today Communications, 38 (2024) 108022
12. Bhargav Rajyaguru, Keval Gadani, MJ Keshvani, Davit Dhruv, AD Joshi, K Asokan, RJ Choudhary, DM Phase, **NA Shah**, PS Solanki, Enormous electroresistance and field effect studies on LaMnO3–δ/La0. 7Ca0. 3MnO3/LaAlO3 manganite–manganite composite structure, Materials Research Bulletin, 170 (2024) 112548
13. NP Barde, SS Shewale, TR Bhoye, SS Pansambal, **NA Shah**, PS Solanki, PP Bardapurkar, Structural, optical, electrical and magnetic properties of lithium zinc ferrite–silica nanocomposites, Journal of Alloys and Compounds, 968 (2023) 172159
14. Prachi Desai, Vaishnavi Darji, M. P. Deshpande, S. H. Chaki, P. S. Solanki, **N. A. Shah**&BharaviHirpara, Synthesis and dielectric studies of Ni doped MgO nanostructure, Inorganic and Nano-Metal Chemistry (2023)
15. VR Chandegara, Payal Joshi, Sangita Chavda, HM Oza, Mayur Parmar, Davit Dhruv, PS Solanki, DD Pandya, AD Joshi, **NA Shah**, RK Trivedi, Studies on properties of green synthesised CuO/ZnO nano particle/nano rod composites in PVA matrix, Optical Materials, 145 (2023) 114369
16. UrvashiJambukiya, MayurParmar, Neeta A Bhammar, KN Rathod, Debashish Sarkar, MR Gonal, Davit Dhruv, PS Solanki, DD Pandya, **NA Shah**, AD Joshi, Investigation on various properties of Dy0. 7Ca0. 3MnO3: TiO2 based nano-micro composites, Journal of Alloys and Compounds, 967 (2023) 171532
17. DK Chudasama, VG Shrimali, Sangita Chavda, Payal Joshi, Urvashi Jambukiya, VS Vadgama, Davit Dhruv, PS Solanki, AD Joshi, NA Shah, DD Pandya, Characterization of

BiFeO3–Al2O3 nano-composites: A study of structural, microstructural, electrical, and magnetic properties, Journal of Alloys and Compounds, 965 (2023) 171510

18. Apexa Maru, CM Panchasara, KN Rathod, Hetal Boricha, Khushal Sagapariya, Bhagyashree Udeshi, Ajay Vaishnani, AD Joshi, DD Pandya, PS Solanki, NA Shah, UV–Visible spectroscopy and dielectric studies of ZnO/TiO_2 composite, 46 (2023) 150
19. Bharavi Hirpara, Keval Gadani, Bhagyashree Udeshi, MR Gonal, AD Joshi, PS Solanki, NA Shah, Temperature dependent transport characteristics of La0. 9Sr0. 1MnO3/SrNb0. 002Ti0. 998O3 device, Materials Today Communications, 35 (2023) 106069
20. Bhagyashree Udeshi, Bharavi Hirpara, Sukriti Hans, M Ranjan, MR Gonal, K Asokan, RK Trivedi, AD Joshi, PS Solanki, NA Shah, Anisotropic electrical properties of 200 MeV Ag+ 15 ion irradiated manganite films, Materials Chemistry and Physics, 301 (2023) 127688
21. DK Chudasama, VG Shrimali, Ajay Vaishnani, CM Panchasara, Nisarg Raval, Urvashi Jambukiya, A Amouri, Davit Dhruv, AD Joshi, PS Solanki, NA Shah, DD Pandya, Investigation on Structural, optical and electrical properties of BiFeO3: ZnO nano–micro particles–matrix composite, Journal of Alloys and Compounds, 960 (2023) 170771
22. Bhargav Rajyaguru, Keval Gadani, Davit Dhruv, V Ganesan, K Asokan, NA Shah, PS Solanki, Tunable resistive nature of LaMnO3/Nd0. 7Sr0. 3MnO3 interfaces: Role of swift heavy ion irradiation, Ceramics International, 49 (2023) 23912-23939
23. Prachi Desai, Vaishnavi Darji, MP Deshpande, SH Chaki, Pinkesh G Sutariya, Heni Soni, Piyush Solanki, **NA Shah**, Bharavi Hirpara, High yield synthesis and study of Cu substitution on characteristics and dielectric properties of MgO nanostructures, Materials Chemistry and Physics, 299 (2023) 127499
24. Himanshu Dadhich, Bhargav Rajyaguru, Keval Gadani, Hardika Goswami, VR Rathod, VG Shrimali, S Mukherjee, K Asokan, **NA Shah**, PS Solanki, Thermionic emission assisted charge conduction mechanisms across LaMnO3/La0. 7Ca0. 3MnO3 interface of manganite thin film structure, Current Applied Physics, 50 (2023) 1-12
25. Hardik Gohil, Bhargav Rajyaguru, Himanshu Dadhich, Keval Gadani, V.G. Shrimali, P.P. Bardapurkar, R.J. Choudhary,D.M. Phase, **N.A. Shah**, P.S. Solanki, Magnetoresistive nature assisted field effect configuration for $LaMnO_3$ / $La_{0.7}Ca_{0.3}MnO_3$ interface, Physica B: Condensed Matter, 649 (2023) 414472
26. NP Barde, VR Rathod, PS Solanki, **NA Shah**, PP Bardapurkar, On the structural, refractive index and energy bandgap based optical properties of Lithium ferrite nanoparticles dispersed in silica matrix, Applied Surface Science Advances 11 (2022) 100302
27. PP Bardapurkar, SN Dalvi, VD Joshi, PS Solanki, VR Rathod, **NA Shah**, NP Barde, Effect of silica matrix on structural and optical properties of cobalt ferrite nanoparticles, Results in Surfaces and Interfaces 8 (2022) 100081
28. Sangita Chavda, Nehanshi Limbasiya, Poonam Vamja, Ajay Vaishnani, Kush Vachhani, Bharavi Hirpara, Manjula Kandoliya, Keval Gadani, Davit Dhruv, A. D. Joshi, P. S. Solanki, **N. A. Shah**, Studies on optical and electrical properties of CdO/Al2O3 composites, Journal of Sol-Gel Science and Technology 104 (2022)169-177
29. Divyarajsinh Zala Davit Dhruv, Faizal Mirza, Neeta A. Bhammar, Hardik Gohil, Himanshu Dadhich, Alpa Zankat, K.N. Rathod, Sanjay Kansara, A.D. Joshi, P.S. Solanki, **N.A. Shah**, Preparation and characterization of CdO-ZnO core shell nano particles: Prepared by two step wet chemical method, Optical Materials 131 (2022) 112684.

30. Bhargav Rajyaguru Keval Gadani, M.J. Keshvani, K.N. Rathod, A.D. Joshi, K. Asokan, R.J .Choudhary, D.M. Phase, **N.A. Shah**, P.S. Solanki, Investigations on interface charge conduction mechanisms for chemically grown manganite – Manganite structure: Hysteretic current – Voltage characteristics, Micro and Nanostructures 168 (2022) 207324.
31. Akshay Surani, Davit Dhruv, Divyarajsinh Zala, D.K. Chudasama, Kush Vachhani, Faizal Mirza, Himanshu Dadhich, P.S. Solanki, **N.A. Shah**, A.D. Joshi, Investigations on structural, microstructural and electrical properties of sol–gel spin coated Bi0.85La0.15FeO3 thin film, Physica B: Physics of Condensed Matter 639 (2022) 413982:1–10
32. Manjula Kandoliya, Bhargav Rajyaguru, Keval Gadani, Naimisha Vaghela, Himanshu Dadhich, D. Venkateshwarlu, A.D. Joshi, **N.A. Shah**, P.S. Solanki, Electric field effects on charge conduction for $LaMnO_3$ controlled $La_{0.7}Ca_{0.3}MnO_3$ manganite, Surfaces and Interfaces 30 (2022) 101949:1–18
33. N.P. Barde, P.S. Solanki, **N.A. Shah**, P.P. Bardapurkar, Investigations on structural, magnetic, elastic and thermodynamic properties of lithium ferrite–silica nanocomposites, Journal of Molecular Structure, 1260 (2022) 132771:1–14
34. Anchal Sharma, Puneet Negi, Ruhit Jyoti Konwar, Hemaunt Kumar, Yogita Verma, Shailja, Prakash Chandra Sati, Bhargav Rajyaguru, Himanshu Dadhich, **N.A. Shah**, P.S. Solanki, Tailoring of structural, optical and electrical properties of anatase TiO_2 via doping of cobalt and nitrogen ions, Journal of Materials Science and Technology 111 (2022) 287–297
35. Vidhi Dhokiya, V.S. Vadgama, Himanshu Dadhich, Bharavi Hirpara, Hardika Goswami, D. Venkateshwarlu, A.D. Joshi, R. Venkatesh, V. Ganesan, P.S. Solanki, **N.A. Shah**, Structural, electrical transport and magnetoresistance properties of $La_{0.7}Ca_{0.3}MnO_3$:ZnO nanocomposites, Materials Chemistry and Physics, 277 (2022) 125430:1–18
36. Nazma D. Dal, Nisha N. Chavda, Parul H. Madhad, Ramesh Kumar, Neeta A. Bhammar, Bhagyashree Udeshi, R.K. Trivedi, P.S. Solanki, **N.A. Shah**, Structural and Electrical Properties of Pure and Doped Lanthanum Oxide, International Journal of Modern Physics B 35 (2021) 2150210:1–13
37. D. Venkateshwarlu, Himanshu Dadhich, Bhargav Rajyaguru, Sukriti Hans, M. Ranjan, R. Venkatesh, V. Ganesan, P.S. Solanki, **N.A. Shah**, Semiconducting nature and magnetoresistance behavior of ZnO / $La_{0.3}Ca_{0.7}MnO_3$ / $SrTiO_3$ heterostructures, Materials Science in Semiconductor Processing 136 (2021) 106154:1–10
38. Neeta A. Bhammar, Bhagyashree Udeshi, Himanshu Dadhich, Vidhi Dhokiya, Keval Gadani, D. Venkateshwarlu, R. Venkatesh, V. Ganesan, A.D. Joshi, P.S. Solanki, **N.A. Shah**, Transport Properties, Charge Conduction Mechanism and Magnetic Behavior of $La_{0.3}Ca_{0.7}MnO_3$:ZnO Nanoparticles, Materials Science in Semiconductor Processing 135 (2021) 106130:1–13
39. V.S. Vadgama, Keval Gadani, Bhagyashree Udeshi, Manan Gal, K.N. Rathod, Hetal Boricha, V.G. Shrimali, Sapana Solanki, Alpa Zankat, Vivek Pachchigar, R.K. Trivedi, A.D. Joshi, M. Ranjan, P.S. Solanki, **N.A. Shah**, D.D. Pandya, Electrical Phase Derived Impedance Spectroscopic Behavior of $La_{0.5}Nd_{0.2}Sr_{0.3}MnO_3$ Manganites, Journal of Alloys Compounds 885 (2021) 160930:1–13
40. Rujuta Lehru, Jaydeep Radhanpura, Ramesh Kumar, Divyarajsinh Zala, V.S. Vadgama, Himanshu Dadhich, V.R. Rathod, R.K. Trivedi, D.D. Pandya, **N.A. Shah**, P.S. Solanki,

Studies on Electrical Properties of Fe Doped ZnO Nanostructured Oxides Synthesized by Sol–Gel Method, Solid State Communications 336 (2021) 114415:1–9

41. Hetal Boricha, Bhagyashree Udeshi, S. Mukherjee, P.S. Solanki, **N.A. Shah**, Resistivity and Magnetoresistance Behavior of $La_{0.7}Sr_{0.3}MnO_3$–$BiFeO_3$ Matrix–Particles Composites, Chemical Physics 549 (2021) 111277:1–11
42. Alpa Zankat, Keval Gadani, Vishal Vadgama, Bhagyashree Udeshi, Manan Gal, Sapana Solanki, Ajay Vaishnani, V.G. Shrimali, P.S. Solanki, **N.A. Shah**, D.D. Pandya, Frequency and Temperature Dependent Electrical Properties of ZnO–SnO_2 Nanocomposites, Physica B: Condensed Matter 617 (2021) 413140:1–11
43. K.N. Rathod, Hetal Boricha, Khushal Sagapariya, Bharavi Hirpara, Davit Dhruv, A.D. Joshi, D.D. Pandya, J.P. Singh, K.H. Chae, K. Asokan, P.S. Solanki, **N.A. Shah**, Probing Charge Transport in Manganite Film Through Switching Parameters, Current Applied Physics 28 (2021) 98–103
44. Joyce Joseph, V.S. Vadgama, P.S. Solanki, **N.A. Shah**, D.D. Pandya, Humidity Sensing Properties of Hierarchical Fe Doped SnO_2 Nanocoral–Like Structures, Journal of Electronic Materials 50 (2021) 3949–3961
45. Alpa Zankat, Keval Gadani, Bhargav Rajyaguru, V.G. Shrimali, Joyce Joseph, Harshida Makwana, R.K. Trivedi, P.S. Solanki, **N.A. Shah**, D.D. Pandya, Structural and Electrical Properties of Sol–Gel Grown (1–x) (ZnO) + (x) (SnO_2) (x = 0, 0.25, 0.5) Nanocomposites, Journal of Sol–Gel Science and Technology 99 (2021) 198–210
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47. Hetal Boricha, Keval Gadani, K.N. Rathod, V.G. Shrimali, Sapana Solanki, Khushal Sagapariya, Alpa Zankat, Davit Dhruv, A.D. Joshi, D.D. Pandya, S. Mukherjee, P.S. Solanki, **N.A. Shah**, Resistive and Magnetoresistance Behaviors of $BiFeO_3$ Incorporated $La_{0.7}Ca_{0.3}MnO_3$ Composites, Materials Chemistry and Physics 267 (2021) 124605:1–11
48. Amiras Donga, K.N. Rathod, Keval Gadani, Davit Dhruv, V.G. Shrimali, A.D. Joshi, K. Asokan, P.S. Solanki, **N.A. Shah**, Thermal Effects on Resistive Switching in manganite – Silicon Thin Film Device, Bulletin of Materials Science 44 (2021) 71:1–12
49. Davit Dhruv, V.G. Shrimali, Kannari Thakrar, Zalak Joshi, Sapana Solanki, A.D. Joshi, P.S. Solanki, **N.A. Shah**, Investigations on the Electrical Properties of Sol–Gel Grown Nanostructured $GdMnO_3$, Ferroelectrics 571 (2021) 230–237
50. Naisargi Kanabar, Keval Gadani, V.G. Shrimali, Khushal Sagapariya, K.N. Rathod, Bhagyashree Udeshi, Joyce Joseph, D.D. Pandya, P.S. Solanki, **N.A. Shah**, Structural and Electrical Properties of Sol–Gel Grown Nanostructured ZnO and $LaMnO_3$ Particles Based Nanocomposites, Applied Physics A 127 (2021) 122:1–11
51. N.P. Barde, S.S. Shewale, P.S. Solanki, **N.A. Shah**, P.P. Bardapurkar, Effect of Silica Matrix on Structural, Optical and Electrical Properties of $Li_{0.5}Fe_{2.5}O_4$ Nanoparticles, Scripta Materialia 194 (2021) 113712:1–6
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55. Rajal Pandya, Hemani Patel, **N.A. Shah**, P.S. Solanki, Y.N. Jani, M.J. Keshvani, Substitutional Effect of Copper Replacement by Cadmium on Structural, Microstructural and Electrical Properties of $Cu_{1-x}Cd_xO$ Oxides, Materials Today Communications 25 (2020) 101458:1–7
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134. Anjana Dogra, S. Rayaprol, **N.A. Shah**, D.G. Kuberkar, Effect of Co–Ga Paired substitution on superconductivity in $YBa_2Cu_3O_7$, Modern Physics Letters B 18 (2004) 485
135. S. Rayaprol, C.M. Thaker, **N.A. Shah**, D.G. Kuberkar, Critical current density and flux pinning in $La_{2-x}Pr_xCa_{2x}Ba_2Cu_{4+2x}O_z$ (x = 0.1–0.5) superconductors, Solid State Communications 131 (2004) 71
136. D.G. Kuberkar, R.S. Thampi, **N.A. Shah**, Krushna Mavani, S. Rayaprol, R.G. Kulkarni, S.K. Malik, W.B. Yelon, Structural and superconducting properties of $La_{2-x}R_xBa_2Ca_yCu_{4+y}O_{10+\delta}$ (R = Nd, Gd; y = 2x) system, Journal of Applied Physics 89 (2001) 7657
137. D.G. Kuberkar, **N.A. Shah**, R.S. Thampi, S. Rayaprol, M.R. Gonal, Ram Prasad, R.G. Kulkarni, Effect of hole filling by Co & hole doping by Ca on superconductivity of $GdBa_2Cu_3O_{7-\delta}$, International Journal of Inorganic Materials 3 (2001) 59
138. D.G. Kuberkar, **N.A. Shah**, R.S. Thampi, M.R. Gonal, R. Prasad, R.G. Kulkarni, Dependence of superconductivity on hole concentration (p_{sh}) in La–2125 perovskite system, Physica B 281 (2000) 924
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140. D.G. Kuberkar, **N.A. Shah**, M.V. Subbarao, Amish G. Joshi, R.G. Kulkarni, Correlation between hole concentration and T_C in $(La_{2-x}Y_x)Ba_2(Ca_yCu_{4+y})O_Z$ superconductor, Physica B 259 (1999) 538

141. M.V. Subbarao, Amish G. Joshi, **N.A. Shah**, D.G. Kuberkar, R.G. Kulkarni, Effect of Ca substitution on the superconductivity of $La_{2.5}Y_{0.5}CaBa_3(Cu_{0.88}Fe_{0.12})_7O_Z$, Journal of Superconductivity 11 (1998) 375
142. Amish G. Joshi, M.V. Subbarao, **N.A. Shah**, D.G. Kuberkar, R.G. Kulkarni, Effect of Mo and Mo–Ca substitution on the superconductivity of $GdBa_2Cu_3O_{7-\delta}$, Journal of Superconductivity 6 (1998) 471
143. **N.A. Shah**, D.G. Kuberkar, B.T. Savaliya, M.R. Gonal, Ram Prasad, R.G. Kulkarni, Effect of calcium substitution on superconductivity and hole concentration in $La_{1.5}Ba_{1.5}Cu_3O_Z$, Bulletin of Materials Science 21 (1998) 463
144. Amish G. Joshi, Utpal S. Joshi, M.V. Subbarao, **N.A. Shah**, D.G. Kuberkar, R.G. Kulkarni, Effect of M and M–Ca substitution on the structure and Superconductivity of $GdBa_2Cu_3O_{7-\delta}$ [M = Mo, Hf], Journal of Superconductivity 11 (1998) 285
145. D.G. Kuberkar, **N.A. Shah**, M.V. Subbarao, Amish G. Joshi, R.G. Kulkarni, Superconductivity in $(La_{2-x}Y_x)Ba_2(Ca_yCu_{4+y})O_Z$ system, Materials Letters 37 (1998) 68
146. K.M. Pansuria, U.S. Joshi, **N.A. Shah**, J.A. Bhalodia, D.G. Kuberkar, G.J. Baldha, R.G. Kulkarni, Compensation of T_C by co–substitution of Ca^{2+} and Co^{3+} in $ErBa_2Cu_3O_{7-\delta}$, Asian Journal of Physics 6 (1997) 1
147. **N.A. Shah**, M.V. Subbarao, Amish G. Joshi, C.M. Thaker, D.G. Kuberkar, R.G. Kulkarni, Effect of Cd and Cd–Ca substitution on the superconductivity in $Y_{1-x}Pr_xBa_2Cu_3O_{7-\delta}$ superconductor, Journal of Superconductivity 10 (1997) 507

Patents:

SR. NO	NAME OF STUDENTS/NAME OF GUIDE	TITLE OF PROJECT	Reference number (If any) / Date of filing	STATUS OF PATENTING
1	J.H Markna, Dilip G. Kuberkar, **Nikesh A. Shah**, Dhiren D. Pandya,Chetan M. Thakar, Piyush S. Solanki,Davit B. Dhruv, Gandha Pinal P.,DangodaraAnkita D., Shyam H. Vasvani, Kaushik R. Babiya,Nehal U. Faldu,Tushar G. Monapara	Carbon Nano-Dot Based Lycopericum Solar Cell	Patent No.- 1570/MUM/2015 Date:16/04/2015	Published
2.	J.H. Markna, Chirag R. Savaliya, Jay Pala, Rajni J. Pala, Suraj K. Kachhad, Meet A. Moradiya, Kuldeep R. Savaliya, D.G. Kuberkar, **Nikesh A. Shah**, Dhiren D. Pandya, Chetan Thaker, Bharat Kataria, Ashish Ravaliya, Ravi J. Mandaliya	Method of Preparing superabsorbent polymers for soil conditioning by efficient release of nano nutrients.	Application No. 201824004827 A, Issue No. 07/2018 Date:16/02/2018	Published

3.	Dr. Hetal Boricha, Dr. Keval Gadani, Dr. Davit B. Dhruv, Dr. Piyush Solanki, **Dr. Nikesh A. Shah**, Dr. Ashwini D. Joshi, Vachhani Kush	A super hydrophobic coating liquid composition	Patent No.- TEMP/E-1/592/2021 Date:06/01/2021	Provisional Patent
4.	Dr. Nikesh A. Shah, Dr. Piyush Solanki, Dr. Ashvini D. Joshi, Dr. Davit B. Dhruv, Dr. Kunalsinh Rathod	A novel process of preparing alumina nano powder	Patent No.- TEMP/E-1/13900/2021-	Provisional Patent
5.	Mr. Bhargav Rajyaguru, Dr. Nikesh Shah, Ms. Bharavi Hirpara, Ms. Bhagyashree Udeshi, Dr. davit Dhruv, Dr. Piyush Solanki	A multipurpose Cryostat Probe for Measuring Electrical Properties	Patent No.- TEMP/E-1/39214/2021-MUM	Provisional Patent

ResearchCollaborations:

A. International Collaborations:

1. Dr. A. Krichene (University of Sfax, Tunisia)

B. National Collaborations:

1. Dr. V. Ganesan (UGC–DAE CSR, Indore, India)
2. Dr. R.J. Choudhary (UGC–DAE CSR, Indore, India)
3. Dr. D.M. Phase (UGC–DAE CSR, Indore, India)
4. Dr. S. Rayaprol (UGC–DAE CSR, Mumbai, India)
5. Dr. Sudip Mukherjee (UGC–DAE CSR, Mumbai, India)
6. Dr. K. Asokan (IUAC, New Delhi, India)
7. Dr. Mukesh Ranjan (IPR, Gandhinagar, India)
8. Dr. Vishvanath Tiwari (Central University of Rajasthan, Ajmer, India)

Thesis Reviewed:

Sr no	Name	University	Date
1.	Dilip B. Patel	M.S. University	18/05/2015
2.	Kanaka Durga	Osmania University	8/04/2017
3.	Adwait D. Mevada	Gujarat University	28/07/2017
4.	Darshana A. Patel	M.S.University	19/12/2017
5.	Sachin H. Dhawankar	Institute of Science,Nagpur	02/05/2018
6.	Divyarajsinh Parmar	C U Shah University	12/10/2018
7.	Reena R. Meena	S.P University	27/11/2019
8.	Alkesh Gandhi	C U Shah University	04/06/2021
9.	J. Vasudevan	Bharatidasan university	04/10/2021
10.	A.Muthuvel	Bharatidasan university	09/11/2021
11.	A. Sherin Fathima	Bharatidasan university	09/11/2021
12.	M.S. Duraisami	Poompuhar College	04/02/2022
13.	T. Nagaraja	Bangalore University	04/02/2022
14.	F. Daisy Selasteen	Bharathidasan University, Tiruchirappalli	19-05-2022
15.	Smt. Shyni V	Research Center University of Kerala	17-06-2022
16.	Omprakash Janagam	Osmania University	03/08/2022

17.	Jigna Bhagvanbhai Karakthala	Gujarat University	30-12-2023
18.	Kamaldeep Bhatia	Gujarat University	02/09/2022
19.	Priyanka Mule	Veer Narmad South Gujarat University	26/06/2023
20.	Jigna Rana	Gujarat University	30/12/2023
21.	Abisha. W	Manonmaniam Sundaranar University, Tirunelveli	23-01-2024
22.	Panchal Reena Jagdishchandra	Shree Govind Guru University, Godhra	27-03-2024
23.	Adlin D Steffy	Manonmaniam Sundaranar University, Tirunelveli	10-06-2024

List of Journal for which Manuscripts have been reviewed

(Total number of paper reviewed 345):

- ACS Omega
- Advanced Ceramics
- Advanced Materials Letters
- Applied Nano Science
- Applied Physics A
- Arabean Journal of Chemistry
- Bentham Science Publisher Journal
- Ceramics International
- Computer and Technology Based Journal
- Composites and Advanced Materials
- European Journal of Physics
- Experimental Nanoscience
- International Journal of Materials Research
- Inorganic Chemistry Communication
- International Journal of Materials Science and Applications
- Journal of Advanced Ceramics
- Journal of Alloys and Compounds
- Journal of Asian Ceramic Materials
- Journal of Inorganic and Organometallic Polymers and Materials

- Journal of Magnetism and Magnetic Materials
- Journal of Materials Science – Materials in Electronics
- Journal of Physics D–Applied Physics
- Journal of Physics: Condensed Matter
- Journal of Physics: Energy
- Macromolecular Symposia
- Materials Chemistry and Physics
- Materials Research Express
- Materials Science in Semiconductor Processing
- Materials Science and Engineering B
- Materials Today Communications
- Materials Today Proceedings
- Measurement Science and Technology
- Nanocomposites
- Nano Energy
- Nanoscale Advances
- Nanotechnology
- New Journal of Chemistry
- Phase Transitions
- Physica B
- Physica Scripta
- Physica Status Solidi B
- Physical Chemistry Chemical Physics
- Physics & Astronomy International Journal
- Physics Related Journal
- Radiation Physics and Chemistry
- Recent Innovations in Chemical Engineering
- Semiconductor Science and Technology
- Solid State Physics Symposium
- Solid State Sciences
- Thin Solid Films

List of Projects (Total: 18):

Sr. No.	Title of the Project	Sanction No.	Total Cost (Rs. In Lakhs)	Agency	Present Status	Role (PI/CI)
1	Development of oxide nanomaterials: thin films for device applications	GUJCOST/ 200816/ CE/05–06 /12121	39.85	GUJCOST, Gandhinagar	Completed	CI
2	Temperature and field sensitivity of manganite thin films	IQAC/ 227/06	00.40	Saurashtra University, Rajkot	Completed	PI

3	Synthesis and characterization of recording power read head and magnetic sensing type CMR materials	34–511 /2008	00.95	UGC, New Delhi	Completed	PI
4	Development and Studies on Functional Oxide Thin Film Devices for Spintronic Applications	SR/S2/ CMP–0124/ 2012	56.00	DST, New Delhi	Completed	CI
5	Studies on Transport and Magnetotransport Behavior of Functional Oxide Based Thin Film Devices	2013/ 37P/40/ BRNS	23.17	BRNS, Mumbai	Completed	CI
6	Swift Heavy Ion (SHI) Irradiation Studies on Doped $YMnO_3$ Based Thin Film Devices	IUAC/ XIII.3A/ 57309	05.79	IUAC, New Delhi	Completed	PI
7.	Swift Heavy Ion (SHI) Irradiation Studies on Manganite Based Thin Film Devices	IUAC/ XIII.3A/ 60312	05.79	IUAC, New Delhi	Completed	CI
8.	Electro and Magnetotransport Studies on Manganite Based Thin Films and Devices: Role of Swift Heavy Ion Irradiation	IUAC/ XIII.3A/ 61304	05.79	IUAC, New Delhi	Completed	CI
9.	Investigations on Manganite – $BiFeO_3$ Multiferroic Composites	CRS–M–242	07.69	UGC–DAE CSR Mumbai	Completed	PI
10.	Current – Voltage Characteristics of Doped Yttrium Manganese Oxide Films	IQAC/GJY MRP/SEPT 2016/1764	01.00	Saurashtra University Rajkot	Completed	PI
11.	Anisotropic magnetoelectric and magnetotransport properties of manganite based thin films	IUAC/ XIII.3A/ 64309	05.79	IUAC, New Delhi	Completed	PI
12.	DST – FIST (Level II)	SR / FST / PSI – 208	198.00	DST New Delhi	Completed	Coordinator
13.	UGC – SAP (Phase III)	530 / 19 / DSR–III / 2015	121.00	UGC New Delhi	Completed	Co–Coordinator

		(SAP – I)				
14.	Investigation on $YMnO_3$ Based Thin Films for Device Application	DAE – BRNS (No. 58/14/09/2020-BRNS/37090)	26.45	Trombay Mumbai	Completed	PI
15.	Role of Swift Heavy Ion Irraiation in Device characteristic of manganite based thin films	IUAC/XIII.3A/UFR-69336	05.79	IUAC, New Delhi	Ongoing	Co-PI
16.	Preparation of Nanostructured Functional Oxide Composites for Various Potential Applications	GUJCOST/STI/2020-21/2259	33.25	GUJCOST, Gandhinagar	Completed	PI
17.	Field effect studies on monovalent doped manganites for device applications: Electronic Excitations through irradiation	IUAC/XIII.3A/UFR-70304	10.11	IUAC, New Delhi	Ongoing	Co-PI
18.	Tuning of electrical properties through field effects for manganite based n-n Junctions: Role of Swift Heavy Ion Irradiation	IUAC/XIII.3A/UFR-71365	06.03	IUAC, New Delhi	Ongoing *(June 2022)*	PI *(MVP)*
19.	Resistive, Magnetoresistance and Magnetic Behaviors of YMnO3 Nanoparticles added Rare Earth Mixed Valent Manganites	CRS/2022-2023/03/868	2.43	UGC-DAE CSR Mumbai	Ongoing	PI (HMO)

Research Interests:

- Mixed Valent Manganites: Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Dilute Magnetic Semiconductors (DMS): Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Multiferroics: Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers

- High Temperature Superconductors (HTSC): Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Synthesis of Materials: Conventional Solid State Reaction Route – Polycrystalline Bulk and Sol–Gel and Co–precipitation Routes – Nanostructures
- Fabrication of Materials: Chemical Solution Deposition (CSD) Technique – Thin Films and Pulsed Laser Deposition (PLD) Technique – Thin Films, Devices, Heterostructures and Multilayers
- Studies on Manganites – DMS – Multiferroics – HTSC Based Thin Film Devices, Heterostructures and Multilayers for Spintronic Applications
- Swift Heavy Ion (SHI) Irradiation and Low Energy Ion Implantation Studies on Manganite, Multiferroic and HTSC Thin Films
- Temperature and Magnetic Field Dependent Neutron Diffraction (ND) Measurements on Manganite and Multiferroic Compounds
- Composites of Manganites – Multiferroics, Manganites – DMS, Manganites – HTSC, Manganites – Semiconductors, Multiferroics – DMS, Multiferroics – HTSC, Multiferroics – Semiconductors, DMS – HTSC, DMS – Semiconductors and HTSC – Semiconductors
- Charge Ordered and $RMnO_3$ Based Manganite Multiferroics – Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- ZnO, Manganite and Multiferroic Based Nanostructures and Thin Films for Solar Cell and Gas Sensing Applications

Ph.D. Students (Completed: 16, working: 7):

Sr. No.	Name of Student	Status	Year of Completion
1	Dhiren Pandya	Completed	2008
2	Paresh Kotak	Completed	2012
3	Nayan Jobanputra	Completed	2014
4	Dilip Ahir	Completed	2015
5	Davit Dhruv	Completed	2015
6	Sanjay Kansara	Completed	2016
7	Zalak Joshi	Completed	2016
8	Sweti Sejpal	Completed	2018
9	Keval Gadani	Completed	2018
10	Hetal Boricha	Completed	2019

11	Krunalsinh Rathod	Completed	2020
12	V.G. Shrimali	Completed	2020
13	Khushal Sagpariya	Completed	2022
14	Bhargav Rajyaguru	Completed	2023
15	Sapana Solanki	Completed	2023
16	Gal Manan	Completed	2024
17	Ajay Vaishnani	On going	
18	Bharavi Hirpara	On going	
19	Nisarg Raval	On going	
20	Chintan Panchasara	On going	
21	Neeta A. Bhammar	On going	
22	Hemangi Oza	On going	
23	Krina A. Ramani	On going	

Chairperson at National/International Conferences / Seminar etc.

1. International Conference on Materials for Energy Applications (ICME) held at S.S. Jain Subodh P.G. (Autonomous) College, Jaipur (Raj.), India during December 06 – 08, (**2018**)

Memberships:

A. National Level:

1.	**Name of Society:**	**Ion Beam Society of India**
	Place of Society:	Inter University Accelerator Centre (IUAC), New Delhi, India
	Time Duration of Membership:	Life Time Membership
2.	**Name of Society:**	Photonics Society of India
	Place of Society:	Cochin University of Science and Technology, Cochin

	Time Duration of Membership:	Life Time Membership

Events Organized:

1.	Proceedings of the National Workshop on Functional Oxides, Nanomaterials and Devices – 2012 (NWFOND – 2012) Department of Physics, Saurashtra University, Rajkot, India 1-2 March 2012
2.	National Workshop on X-ray Diffraction Techniques for Materials Characterization – 2014 (X'Raydiate – 2014) Department of Physics, Saurashtra University, Rajkot, India September 04–05, 2014
3.	2nd One-Day Seminar on "Frontiers in Research on New Materials" Department of Physics, Saurashtra University, Rajkot, India 23rd January 2015
4.	DST - SERB School on "Ion Interaction With Matter" Department of Physics, Saurashtra University, Rajkot, India March 2-21, 2015
5.	One Day National Workshop On "Techniques For Materials Characterizations" Department of Physics, Saurashtra University, Rajkot, India October 21, 2015
6.	International Conference on Material Science & Technology 2016 (ICMTech – 2016) University of Delhi, India March 01–04, 2016
7.	International Conference on Functional Oxides and Nanomaterials (ICFONM – 2016) Department of Physics, Saurashtra University, Rajkot, India November 11–13, 2016
8.	One Day National Workshop on "Recent Trends in Experimental Condensed Matter Physics" Department of Physics, Saurashtra University, Rajkot, India March 21, 2017
9.	One Day National Workshop on "Recent Trends in Experimental Condensed Matter Physics" Department of Physics, Saurashtra University, Rajkot, India March 21, 2017
10.	"Anusandhan":- Webinar on "Research Methodology & Frontiers in Science" Department of Physics, Saurashtra University, Rajkot, India April 26 – 29, 2020
11.	Bhautik Yatra – A Travel for Scientific Indian Minds A webinar Jointly organized by Department of Physics, Saurashtra University, Department of Science and Technology (DST), Govt. of Gujarat and Gujarat Council on Science and Technology (GUJCOST) May 21 – 29, 2020
12.	Getting Started in Skywatching A webinar Jointly organized by Big Bang Astronomy Club of Shri O. V. Sheth Regional Community Science Center-Rajkot, Department of Physics-Saurashtra University-Rajkot, Department of Science & Technology-Government of Gujarat (DST) & Essencetech May 25-26, 2020

13.	Fun with Science Experiments (Demonstration) A webinar Jointly organized by Shri. O. V. Sheth Regional Community Science Center, Rajkot, Department of Physics, Saurashtra University, Rajkot, Department of Science & Technology, Government of Gujarat (DST), Gujarat Council on Science & Technology (GUJCOST) & Essencetech May 27, 2020
14.	International Webinar on Innovations & Technological Startups in the current crisis of COVID Pandemic SSIP Cell, Saurashtra University, Rajkot May 11, 2021
15.	Vyakruti- Experimental Techniques and Related Analysis Methods in Condensed Matter Physics A webinar Jointly organized by Laboratory of Functional Oxides, Department of Physics, Saurashtra University, Rajkot and GUJCOST, DST, Govt. of Gujarat, Gandhinagar July 9-10, 2021
16.	Emerging Trends in Functional Oxides and Nanomaterials (ETIFON)- 2021 Organized by Department of Physics, Saurashtra University, Rajkot (Gujarat) on October 28-29, 2021 at Department of Physics, Saurashtra University, Rajkot (Gujarat).
17.	Vigyan Arohan – (A Series of Scientific Talks) is regularly organized from time to time at the Department of Physics, Saurashtra University, Rajkot (Gujarat) jointly with Vigyan Gurjari (A Gujarat Prant Unit of Vigyan Bharati-VIBHA). Total 8 Invited talks and one special talk along with the outreach program by eminent personalities are arranged (Till August 2024).
18.	Motivational Seminar under M.Sc. Orientation program 2024 organized by the Department of Physics, Saurashtra University, Rajkot (Gujarat) and Vigyan Gurjari on 29th August, 2024

Events Organized under Vigyan Gurjari (A Gujarat Prant Unit of Vigyan Bharati-VIBHA) as President, Rajkot Unit, Vigyan Gurjari:

19.	Student Innovation Fest (SIF)-2023 organized by Vigyan Gurjari along with various institutes of which 337 academicians, scientists, and Industry Experts from different Universities, Research Institutes, Colleges & Schools participated and delivered lectures on Science, Technology & Innovation for 35000+ Students and set a New Record on 10th August 2023 at Gandhinagar, Gujarat, India in the "World Records India".
20.	Convenor: Bhartiya Vigyan Sammelan (BVS)– 2023, A National conference was organized by Vigyan Bharati and Government of Gujarat at Ahmedabad from December 21-24, 2023.
21.	Science Exhibition-2024 under Gujarat Vigyan Sammelan (GVS) 2024 organized by Vigyan Gurjari and A.V.P.T. Institute, Rajkot at A.V.P.T. Institutecampus, Rajkot (Gujarat)from March 22-24, 2024.
22.	Vigyan Yatra-2024 under Gujarat Vigyan Sammelan 2024 was organized by the Department of Physics, Saurashtra University, Rajkot (Gujarat) and Vigyan Gurjari in which total 18 talks were arranged for total 9 days by eminent Scientists, Faculties and experts from various

institutes of international repute from March 04-15, 2024 on online platform.

23.	Convenor: Gujarat Vigyan Sammelan – 2024. National Conference on Contribution of Indian Scientist on National Science Day under Gujarat Vigyan Sammelan – 2024 jointly organized by Saurashtra University, Rajkot and Vigyan Gurjari on 28th February, 2024.
24.	National Conference on Contribution of Indian Scientist on National Science Day under Gujarat Vigyan Sammelan – 2024 jointly organized by Shri S V Virani High School, Rajkot (GUJARAT) and Vigyan Gurjari on 28th February, 2024.
25.	National Conference on Recent Trends in Engineering and Technology organized by V.V.P. Engineering College, Rajkot and Vigyan Gurjari on 23rd March, 2024.
26.	National Conference on Recent Innovations in Science and Technology (RIST 2024) organized by Government Engineering College (GEC), Rajkot and Vigyan Gurjari on 04thApril, 2024.
27.	Convenor, Saurashtra-Kutch Zone, Vigyan Gurjari Student Innovation Fest (SIF)-2024 is being organized by Vigyan Gurjari along with various institutes in which 501 academicians, scientists, and Industry Experts from different Universities, Research Institutes, Colleges & Schools will participate and deliver lectures on "Eminent Indian Scientists and Contribution of Indian Scientists in Science" for around 50000+ Students and are going to set a New Record on by arranging between August 1 to 12, 2024 in various institutes of Gujarat, India which will be further applied for the "World Records India" for the second time.

A. International/National Events:

➲ International / National: Conferences / Seminars / Symposia / Workshops / Schools (Attended)

1. International Workshop on High Temperature Superconductivity- Ten Years After Its Discovery held at Department of Physics, Jaipur 16-21 Dec. **(1996)**
2. DAE Solid State Physics Symposium 1996 held at Bhabha Atomic Research Centre (BARC), Trombay, Mumbai 27–31 Dec.**(1996)**
3. The 6th National Seminar on X-ray Spectroscopy and Allied Areas held at Govt. P.G.Arts& Science College, Ratlam (M.P.) 17-19 Nov. **(1997)**
4. DAE Solid State Physics Symposium held at BRNS, Department of Atomic Energy at Cochin University of Science & Technology, Kerala 27–31 Dec.**(1997)**
5. Ninth Annual General Meeting of MRSI held at Materials Research Society of India at IIT Madras 11-13, Feb.**(1998)**
6. 41st DAE Solid State Physics Symposium held at Kurukshetra University, Kurukshetra 27-31, Dec. **(1998)**

7. The 5th IUMRS International Conference in Asia Bangalore held at The international Union of Material Research Societies at IIS, Jawaharlal Nehru Centre for advanced scientific research, Bangalore 13-16, Oct. **(1998)**
8. The 4th National Conference on "Indian Society of Statistics, Computer and Application held at Saurashtra University, Rajkot 24–26 Nov. **(2001)**
9. International Workshop on Nanomaterials, Magnetic Ions and Magnetic Semiconductors studies mostly by Hyperfine Interactions held at Department of Physics, Faculty of Science, MS University of Baroda, 10–14 Feb. **(2004)**
10. National Seminar on Emerging Technologies & Applications held at Department of Computer Science, Saurashtra University, Rajkot 25–26 Feb. **(2004)**
11. International Conference on Nano Science and Technology held at Indira Gandhi Centre for Atomic Research Kalpakkam, TN, 27–29 Feb. **(2004)**
12. Seminar on Current Trends in Materials Research held at Department of Physics, Saurashtra University, Rajkot 28 Feb. **(2005)**
13. 8th International Conference on Nanostructured Materials NANO–2006 held at I.I.Sc., Bangalore 20-25 Aug.**(2006)**
14. National Seminar on Recent Trends in Materials Science held at Department of Physics, Saurashtra University, Rajkot 25March **(2007)**
15. DAE-BRNS 4th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials held at DAE-BRNS and Saurashtra University, Rajkot 3-5 Oct. (2007)
16. National Seminar on Advances in Material Research held at Department of Physics, Saurashtra University, Rajkot 15 Feb. **(2008)**
17. Workshop on synthesis and characterization of Nano-structured Materials held at Applied Physics Department, Faculty of Technology, MS University of Baroda, Baroda 30 March **(2008)**
18. 21st AGM MRSI Meeting held at Material Research Society of India at MS University of Baroda, Baroda 9–11 Feb. **(2010)**
19. National Workshop on X–ray Diffraction Techniques and Applications – 2010 held at Department of Physics, Saurashtra University, Rajkot 17–19 March **(2010)**
20. International conference on Information, Knowledge & Research in Engineering, Technology & Sciences held at G.K.Bharad Institute of Engineering, Rajkot and A.E.S., Sangli, Maharashtra 24-25 March **(2012)**
21. Nanotechnology-Innovative Materials, Processes, Products and Applications held at Bharati Vidyapeeth University, Pune 18-19, Oct. **(2012)**

22. International Conference and Workshop on Nanostructured Ceramics and Other Nanomaterials held at Department of Physics & Astrophysics, University of Delhi, New Delhi 13–16 March **(2012)**
23. National Seminar on Scientific Wealth of Physics held at H & H B Kotak Institute of Science, Rajkot 26 Aug. **(2012)**
24. International Conference on Innovative Technologies in Engineering and Sciences, held at V.V.P. Engineering College, Rajkot, 22–23 Dec. **(2012)**
25. Current Trends in Research and Applications of Physical Sciences in Gujarat held at S.P. University, V.V. Nagar 29 Dec. **(2012)**
26. National Seminar on Nanostructured and Thin film coationg-2014 held at Gujcost, Gandhinagar VVP Engineering College, Rajkot 24 Jan. **(2014)**
27. "National Workshop on X–ray Diffraction Techniques for Materials Characterization – 2014" (X`' Raydiate – 2014) held at Department of Physics, Saurashtra University, Rajkot during 4–5 September (**2014**)
28. 2nd One-Day Seminar on "Frontiers in Research on New Materials" held at Department of Physics, Saurashtra University, Rajkot on January (**2015**)
29. DST – SERB School on "Ion Interaction with Matter" held at Department of Physics, Saurashtra University, Rajkot during March 02 – 21, (**2015**)
30. One Day National Workshop on "Techniques for Materials Characterizations" held at Department of Physics, Saurashtra University, Rajkot October 21, (**2015**)
31. International Conference on Condensed Matter & Applied Physics- 2015 (ICC - 2015) at Bikaner, Rajasthan on October 30- 31, **(2015)**
32. 9th National Level Science Symposium-2016 on Recent in Science and Technology to be held at Christ College, Rajkot, February 14 (**2016**)
33. International Conference on Functional Oxide and Nanomaterials (ICFONM-2016) held at Department of Physics, Saurashtra University, Rajkot during November 11 – 13, (**2016**)
34. One Day National Workshop on "Recent Trends in Experimental Condensed Matter Physics" held at Department of Physics, Saurashtra University, Rajkot March 21, (**2017**)
35. One Day Workshop on "DATA ANALYSIS USING SPSS" organized by Department of Statistics, Saurashtra University, Rajkot, Gujarat on 31st July (**2017**)
36. 4thInternational Conference on Nanoscience and Nanotechnology (ICONN-2017) held at Department of Physics and Nanotechnology, SRM University, Kattankulathur, Chennai, India during August 09 – 11, (**2017**)

37. National Seminar on Advances in Nanomaterials Research (ANR-2018) held at Department of Nanoscience & Advanced Materials Saurashtra University, Rajkot, India February 15, (**2018**)
38. One Day National Workshop on "Patent" held at Saurashtra University, Rajkot, July 28, (**2018**)
39. International Conference on Materials for Energy Applications (ICME) held at S.S. Jain Subodh P.G. (Autonomous) College, Jaipur (Raj.), India during December 06 – 08, (**2018**)
40. Gujarat State Startup and Innovation Hub (i-Hub), certificate course on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHT (IPR)" conducted during July 6, 2020 to September 14, **2020**
41. Session Chair at "National Conference on Sustainable Water Solution for Saurashtra and Kutch region" on 8th September 2024

Lectures Delivered by the Teacher at the Institutions of Higher Education (UGC:HRDC Rajkot):

No.	Topic	Date(s)	Name of the Scheme under which the lecturer was arranged
1	Special Summer School	02/06/2014 to 22/06/2014	**SSS-2014**
2	Interaction Programme	12/01/2015 to 01/02/2015	**OP-108**
3	Course Coordinator	25/05/2015 to 14/06/2015	**SSS-2015**
4	Micro Teaching	20/07/2015 to 16/08/2015	**OP-108**
5	Micro Teaching	20/07/2015 to 16/08/2015	**OP-109**
6	Impact of API on Higher Education	01/02/2016 to 28/02/2016	**OP-110**
7	Impact of API on Higher Education	29/02/2016 to 27/03/2016	**OP-111**
8	Impact of API on Higher Education	29/02/2016 to 20/03/2016	**RC-211**
9	Impact of API on Higher Education	11/09/2017 to 08/10/2017	**OP-116**
10	Quality Assurance by Academic Excellence	04/11/2019 to 23/11/2019	**OP -121**
11	Quality Assurance by Academic Excellence	17/08/2020 to 29/08/2020	**RC-235**
12	Research, Innovations & Ranking in NEP : 2020	06/09/2021 to 18/09/2021	**RC-240**
13	API in Higher Education : Past and Present	08/01/2024 to 03/02/2024	**FIP-129**

14	Quality Assurance by Academic Excellence	08/01/2024 to 03/02/2024	**FIP-129**
15	Research, Innovation and Ranking in NEP 2020 : Multidisciplinary aspects	29/01/2024 to 10/02/2024	**RC : 247**
16	Research, Innovation and ranking in NEP-2020 : Multidisciplinary Aspects	26/02/2024 to 23/03/2024	**FIP-130**
17	Scientific Approach in Research	-	**NEP Orientation and Sensitization Programme**

Expert Talks / Invited Lectures Delivered:

Sr. No.	TitleofLecture/AcademicSession	Title of Conference/ Seminar etc	Organizedby
1	Participant's presentation 23/07/2008	Refresher Course (RC) SSS-08	**UGC-ASC, Rajkot**
2	Participant's presentation 23/03/2010	RC-184	**UGC-ASC, Rajkot**
3	Visible PC Hardware Prospective 25/03/2010	RC-184	**UGC-ASC, Rajkot**
4	Build a PC from Scratch and Installing Operating System 26/03/2010	RC-184	**UGC-ASC, Rajkot**
5	Visible PC Hardware Prospective 23/03/2011	RC-190	**UGC-ASC, Rajkot**
6	Participant's presentation 26/05/2011	OrientationProgram(OP)-93	**UGC-ASC, Rajkot**
7	TheVisible PC: Fundamental & Hardware perspective 30/05/2011	OP-191	**UGC-ASC, Rajkot**
8	Visible PC Hardware Perspective 20/09/2011	RC-191	**UGC-ASC, Rajkot**
9	Computer Applications 03/12/2011	Ph.D.CourseWork SanskritDepartments	**SaurashtraUniversity**
10	Participant's presentation 16/03/2012	RC-192	**UGC-ASC, Rajkot**
11	Participant's presentation 17/03/2012	RC-192	**UGC-ASC, Rajkot**
12	Participant's presentation 29/08/2012	RC-195	**UGC-ASC, Rajkot**
13	Participant's presentation 29/08/2012	RC-195	**UGC-ASC, Rajkot**
14	PC Fundamentals: Hardware Point of View 13/09/2012	OP-96	**UGC-ASC, Rajkot**

15	Computer Fundamentals 27/10/2012	Ph.D. CourseWork atGujaratiDepartment	**SaurashtraUniversity**
16	Computer Applications in Research 02/11/2012	Ph.D. CourseWork atGujaratiDepartment	**SaurashtraUniversity**
17	BasicinternetandE-mailing27/12/2012	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
18	InformationCommunicationandTechnology(ICT) 24/12/2012	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
19	Fundamentals ofComputer09/03/2013	Remedialcoaching	**UGCRemedialCoachingCentre**
20	ToolsAndTechniquesOfPCHardware11/03/2013	Remedialcoaching	**UGCRemedialCoachingCentre**
21	PCHardDiskDriveAndData12/03/2013	Remedialcoaching	**UGCRemedialCoachingCentre**
22	OpticalStorageAndApplicationInPC13/03/2013	Remedialcoaching	**UGCRemedialCoachingCentre**
23	PCTroubleshootingTechniques28/03/2013	Remedialcoaching	**UGCRemedialCoachingCentre**
24	HigherEducationSystem22/06/2013	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
25	HigherEducationSystem:GovernancePolity AndAdministration 23/06/2013	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
26	StructureOfTheInstitutionsForHigher LearningAndResearchInIndia30/08/2013	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
27	HigherEducation Setup31/08/2013	UGCNET/GSET	**UGCNET/GSET Coaching Centre**
28	Participant'spresentation04/10 /2013	OP-100	**UGC-ASC, Rajkot**
29	Participant'spresentation05/10 /2013	OP-100	**UGC-ASC, Rajkot**

30	QuantitativeResearch12/11/2013	Ph.D. CourseWork atPhysicsDepartment	**SaurashtraUniversity**
31	ComputerApplication08/11/2013	Ph.D. CourseWork atPhysicsDepartment	**SaurashtraUniversity**
32	ComputerApplication07/11/2013	Ph.D. CourseWork atPhysicsDepartment	**SaurashtraUniversity**
33	QuantitativeResearch06/11/2013	Ph.D. CourseWork atPhysicsDepartment	**SaurashtraUniversity**
34	HigherEducationSystem:GovernancePolity AndAdministration 01/12/2013	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
35	PreparationofResearchArticle/Paper	ResearchInteractionprogram	**UGC-ASC, Rajkot**
36	ComputerApplicationsinResearch06/12/2013	Ph.D. CourseWork atGujaratiDepartment	**SaurashtraUniversity**
37	Participant'spresentation09/12/2013	RC-201	**UGC-ASC, Rajkot**
38	Formal DistanceEducation20/12/2013	UGCNET/GSET	**UGCNET/GSET CoachingCentre**
39	ResearchMethodology19/11/201311.00to14.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**
40	ResearchMethodology19/11/201315.00to18.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**
41	ResearchMethodology23/11/201311.00to14.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**
42	ResearchMethodology23/11/201315.00to18.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**
43	ResearchMethodology30/11/201311.00to14.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**
44	ResearchMethodology30/11/201315.00to18.00	Ph.D.CourseWork atElectronicsDepartment	**SaurashtraUniversity**

45	"MakeInIndia"InspireScienceCamp2 1st July,2018	StudentStartupandInnovationPolicy(SSIP)	**ChristCollageRajkot,India**
46	Impact of API on Higher Education: Past & Present 28 th June 2021	IQAC at Parul University	**Parul University, Vadodara**
47	How To Write A Scientific Research Paper 14/06/2021	Webinar for Researchers at UGC-HRDC Gujarat University	**UGC-HRDC , Gujarat University, Ahmedabad**
48	How to write research proposal and innovative topics for PhD Programme 4 th April 2021	Young Researchers Meet for Resurgence and Innovation,	**VNSGU, Surat**

Dr. Nikesh A. Shah

Prof. Nikesh A. Shah, is currently working as Professor and Head, Department of Physics, Saurashtra University, Rajkot. He has completed his B.Sc. (Physics) and M.Sc. (Physics with Electronics) from Saurashtra University, Rajkot in 1993 and 1995, respectively. Prof. Shah has completed his Ph.D. in oxide superconductors from Department of Physics, Saurashtra University, Rajkot. He did his research work on Neutron Diffraction Studies on High Temperature Superconductors at BARC, Mumbai. Prof. Shah is working on functional oxide materials such as mixed valent manganites, multiferroics, diluted magnetic semiconductors, high temperature superconductors and metal oxides. He has an expertise to work on polycrystalline bulk, nanostructures, thin films, devices, heterostructures, bilayers, multilayers and composites (powders and thin films) consists of various functional oxides. He has capability to work with various synthesis methods and fabrication techniques such as solid state reaction route, sol–gel method, co–precipitation, chemical solution deposition, pulsed laser deposition and RF/DC sputtering. He has proficiency to deal with the research on some special techniques such as swift heavy ion irradiation, low energy ion implantation and temperature–magnetic field dependent neutron diffraction. He has also an expertise to deal with materials research including gas sensors, solar cells, high energy radiation and bio–physics based activities.

Prof. Shah has received some prestigious awards and felicitations including best research paper presentation award 02 in international and 01 in national event. Prof. Shah has been awarded Prof. Dolarrai Makad Award for Excellence in Research (Electronics) for 2011-12 and (Physics) for 2015–16 and Smt. R. D. Gardi “Dikra Nu Ghar – Vrudhaashram” Dholra Award (2016) by Sadbhavna Trust Rajkot. He has been felicitated by Commissioner of Higher Education, Gujarat for Academic Excellence in Higher Education in 2013 at Saurashtra University, Rajkot. He has received Supreme Teacher award 2019 by Junior Chamber International (JCI) Platinum at Kansagara College, Rajkot and Nation Builder’s Award by Roatary Club Rajkot. Present responsibilities of Prof. Nikesh Shah includes Head, Department of Physics Saurashtra University; Coordinator CCDC (Career Counseling & Development Centre) Saurashtra

University; Coordinator, Center for Excellence: Nanotechnology Saurashtra University; Member Board of Study Dept. of Electronics at Saurashtra University; Member, IQAC, Parul University, Vadodara; Member of Board of Study Physics, Parul University, Vadodara; Vice President, Saurashtra University Saikshik Sangh, Rajkot; Co-ordinatorUGC-DRS Phase III (121 Lacs project), DST-FIST Level II (198 Lacs project) and Department of Nanoscience (200 Lacs project) and Ex Director (incharge), UGC-MMTTC Saurashtra University. Till date 16 Research Scholar have been awarded Ph.D. Degree (02 from Engineering field and 01 from IT field) and 07 Research Scholars are working for Ph.D. under his guidance. 12 Students have been awarded M.Phil. degree under his guidance. He has published 144 international research articles in reputed journals and 36 national conference proceedings through various international and national events. He has also published 14 books under UGC unassigned Grant and published 5 Technical Articles in Magazines of Electronics Field. Prof. Shah has published 2 patents and also has 3 provisional patents. Prof. Shah has organized maInternational/National/Conference/School/Workshop at Saurashtra University, Rajkot. He has delivered talks as expert in various government institutes and colleges. He was also coordinator in orientation programmes, refresher courses and short term courses at UGC: Human Resource development centre (HRDC), Saurashtra University, Rajkot. He has also delivered expert talks in orientation programmes and refresher courses organized by UGC: HRDC, Saurashtra University, Rajkot. Minor/Major 06 research projects completed funded by UGC/GUJCOST and 03 major research project completed funded by DAE-BRNS, SERB and IUAC. He has been sanctioned for 10 major research projects as principal investigator and 07 major research projects as co–investigator. He is the member of Editorial Board in reputed 08 international journals. He has reviewed about 345 articles for 50 different internationally reputed journals. He has strong research collaborations with Sfax University, Tunisia; UGC–DAE CSR, Indore; UGC–DAE CSR, Mumbai; IUAC, New Delhi; IPR, Gandhinagar; Central University of Rajasthan, Ajmer; UGC–DAE CSR, Kalpakkam.