

CURRICULUM VITAE

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(M. Sc., Ph. D.)

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Date of birth: 29th March 1985

Nationality: Indian

I. PERSONAL DETAILS

1	Sex	Female
2	Blood group	O +ve
3	Marital status	Married
4	Languages known	Urdu, Hindi, Marathi and English
5	Residential address	205/1/2/3, Telangi Paccha Peth, Jail Road Police Station Road, Solapur -413005, Maharashtra, India.
6	Tel. No.	+91-217-2727099
7	Area of Specialization	Physics (M. Sc. - Solid State Physics Ph. D. - Materials Science)
8	Research and Teaching	Research experience: 8 yrs (excluding Ph. D.), Teaching experience: 2.33 yrs
9	Research area	Porous Nanomaterials (Aerogels) for Thermal Insulation, Catalysis, PEC water splitting, Hydrophobic coatings for Self cleaning purpose, High-k metals oxide for FETs.

II. ACADEMIC QUALIFICATIONS

Exam Passed	Year of completion	Subjects / Main specialization	School / University	% of marks / Grade
S.S.C.	2000	Urdu, Marathi, Hindi, English, Maths, Science, Social Science	Pune Board	83.46 % Distinction
H.S.C.	2002	Physics, Maths, Biology, Chemistry, Urdu, English	Pune Board	76.16 % Distinction
B. Sc.	2002-2005	Physics (Chemistry, Maths, Electronics)	Shivaji University, Kolhapur	77.64 % Distinction
M. Sc.	2005-2007	Physics (Solid State Physics)	Shivaji University	67.33 % First Class
Ph. D.	2007-2011	Physics (Materials Science)	Shivaji University	Awarded

III. RESEARCH PUBLICATIONS

1. Research Papers in Peer-Reviewed or UGC listed Journals

SN	Title of the paper	Journal Name, Page Nos., Vol. No., Issue no., Year of publication,	ISBN/ ISSN No.	Impact Factor	Principal Author/ Supervisor
1	A new route for preparation of sodium-silicate-based hydrophobic silica aerogels via ambient-pressure drying	Science & Technology of Advanced Materials, 035006 (10 pp), 9, 2008	ISSN:1878-5514	6.9	Principal Author
2	Physico-chemical properties of ambiently dried sodium silicate based aerogels catalyzed with various acids	Journal of Sol-Gel Science & Technology, 87-97, 50, 2009	ISSN:1573-4846	3.2	Principal Author
3	Influence of various processing parameters on water-glass-based atmospheric pressure dried aerogels for liquid marble purpose	Journal Materials Science, 2944-2951, 45, 2010	ISSN:1573-4803	3.9	Principal Author
4	Improvement in optical and physical properties of TEOS based aerogels using acetonitrile via ambient pressure drying	Ceramic International, 6883-6888, 38, 2012	ISSN:1873-3956	5.6	Principal Author

5	Synthesis of MWCNTs doped sodium silicate based aerogels by ambient pressure drying”,	Journal of Sol-Gel Science & Technology, 201-207, 62, 2012	ISSN :1573-4846	3.2	Principal Author
6	Optically transparent silica aerogels based on sodium silicate by a two step sol-gel process and ambient pressure drying	Solid State Sciences, 50-57, 18, 2013	ISSN: 1293-2558	3.3	Principal Author
7	Sol-gel synthesis of high surface area nanostructured zirconia powder by surface chemical modification	Powder Technology, 314-318, 239, 2013	ISSN: 0032-5910	4.6	Principal Author
8	Effects of successive additions of two capping ligands on the structural properties of PbO nanoparticles	Journal of Nanoparticles Research, 2070 (8 pp), 15, 2013	ISSN:1572-896X	2.6	Principal Author
9	Microstructural characteristics of SrTiO ₃ nanoparticle: the role of capping ligand concentration	Micro & Nano Letters (IEEE), 273-276, Vol. 11 (5), 2016	ISSN:1750-0443	1.3	Principal Author
10	Effect of thermal treatment on the textural properties and thermal stability of surface modified zirconia aerogel powders	International Journal of Nanotechnology, 452-462, Vol. 13, Nos. 4/5/6, 2016	ISSN:1741-8151	0.3	Principal Author
11	Ultrasonically assisted synthesis of lead oxide nanoflowers using ball milling	International Nano Letters, 149-155, 7, 2017	ISSN: 2228-5326	4.0	Principal Author
12	Evolution of textural characteristics of surfactant-mediated mesoporous zirconia aerogel powders prepared via ambient pressure drying	International Nano Letters, 221-228, Vol. 8 (3), 2018	ISSN: 2228-5326	4.0	Principal Author
13	Influence of glycerol additive on the chemical structure, hydrophobicity, morphology and optical properties of sol-gel based zirconia coatings	ES Materials & Manufacturing, 16-21, 10, 2020	ISSN:2578-062X	0.6	Principal Author
14	Self cleaned zirconia coatings prepared using co-precursor sol-gel method	Surface Engineering, 1059-1066, Vol. 37 (8), 2021	ISSN: 1743-2944	2.6	Principal Author
15	Zirconia Coatings as Efficient Soil Moisture Sensors for Water Irrigation	IEEE sensors, 21205-21211, Vol. 21, 2021	ISSN 1558-1748	4.5	Principal Author
16	Improvement in the characteristics of ambient pressure dried silica aerogels for thermal insulation purpose	Journal of Porous Materials, 115-123, Vol. 31, 2024	ISSN:1573-4854	3.2	Principal Author
17	Low thermal conductive, transparent and hydrophobic ambient pressure dried silica aerogels with various preparation conditions using sodium silicate solutions	Journal of Sol-Gel Science & Technology, 85-94, 47, 2008	ISSN:1573-4846	2.3	Co-author
18	Hydrophobic and low density silica aerogels dried at ambient pressure using TEOS precursor	Journal of Alloys and Compounds, 296-302, 471, 2009	ISSN: 1873-4669	6.3	Co-author
19	Reduction in the processing time of doped sodium silicate based ambient pressure dried aerogels using shaker	Microporous & Mesoporous Materials, 93-99, 134, 2010	ISSN: 1873-3093	4.7	Co-author

20	Effect of iron acetylacetonate on physico-chemical properties of waterglass-based aerogels by ambient pressure drying	Journal of Sol-Gel Science & Technology, 95-100, 57, 2010	ISSN :1573-4846	2.3	Co-author
21	Influence of preparation conditions on nanoporous structure and optical transmission of sodium silicate based ambient pressure dried aerogels employing shaking	Journal of Porous Materials, 751-759, 18, 2010	ISSN:1573-4854	2.5	Co-author
22	Enhancement in hydrophobicity of silica films using metal acetylacetonate and heat treatment	Journal of Physics & Chemistry of Solids, 45-49, 72, 2010	ISSN: 1879-2553	4.9	Co-author
23	Self-cleaning silica coatings on glass by single step sol-gel route	Surface & Coatings Technology, 5338-5344, 205, 2011	ISSN: 1879-3347	6.1	Co-author
24	Silica xerogel films hybridized with carbon nanotubes by single step sol-gel processing	Journal of Non-Crystalline Solids, 550-556, 358, 2011	ISSN: 1873-4812	3.5	Co-author
25	Effect of sulphur dopants on the porous structure and electrical properties of mesoporous TiO ₂ thin films	Materials Letters, 401-404, 106, 2013	ISSN: 1873-4979	2.7	Co-author
26	Dielectric properties of Poly(4-vinylphenol) with embedded PbO nanoparticles	Polymers for Advanced Technologies, 245-249, Vo. 27 (2), 2016	ISSN:1099-1581	3.4	Co-author
27	'MWCNT/Silica Aerogel: Preparation, Characterisation and Applications in Heterogeneous Catalysis and Decolourisation of Aqueous Dye Solutions	Songklana-karin Journal of Science and Technology, 1181-1185, Vol. 40 (5), 2018	ISSN 2408-1779	0.16	Co-author
28	One-Pot Sol-Gel Synthesis of Highly Insulative Hybrid P(AAm-CO-AAc)-Silica Aerogels with Improved Mechanical and Thermal Properties	Gels, 651-666, 9, 2023	ISSN:2310-2861	5.3	Co-author
29	Ionotropically-engineered synthesis of mechanically robust hybrid sodium alginate-silica aerogels with enhanced specific surface area for high-capacity and selective dye adsorption from wastewater	Chemical Engineering Journal, 160590 (17 pgs.), 507, 2025	ISSN: 1873-3212	13.2	Co-author
30	Chemical deposition and crystallographic studies of CdTe thin films	Avishkar-Solapur University Research Journal, 2015, 4, 29-34	ISSN 2319-2410	-	Co-author
31	Synthesis and properties of metal oxide aerogels via ambient pressure drying	Journal of Nanoscience & Nano-technology, 1-11, Vol. 18, 2018,	ISSN: 1533-4899	1.987	Principal Author
32	MWCNT incorporated silica aerogel prepared by ambient pressure drying: A recyclable catalyst for multicomponent synthesis of	Iranian Chemical Communication, 19-29, Vol.6, 2018	ISSN:2345-4806	-	Co-author

	benzylpyrazolyl coumarin at room temperature				
33	Studies of structural, morphological and dielectric properties of $Ba_{1-x}Sr_xTiO_3$ powders synthesized via cost-effective co-precipitation method	International Journal of Advanced Scientific Research and Management, 84-87, Vol. 4 (7), 2019	ISSN 2455-6378	-	Corresponding author

2. Publications (other than Research papers) (Books, Chapters in Books)

(i) Books published with ISSN/ISB Number

SN	Title of the Book with no. of pages	Publisher name with ISBN/ ISSN No.	International/ National Publisher	No. of Co-Author	Whether Principal Author/ Co-Author
1	Sodium silicate-based aerogels via ambient pressure drying, 104 pages	LAMBERT Academic Publishing, ISBN 978-3-8484-1802-2	International	0	Principal Author

(ii) Chapters in Edited Books with ISSN/ISBN

SN	Title of the Book with no. of pages	Publisher name with ISBN/ ISSN No.	International / National Publisher	No. of Co-Author	Principal Author/ Co-Author
1	Aerogels Handbook of Advances in Sol-Gel Derived Materials and Technologies, 965 pages	Springer, ISBN: 978-1-4419-7477-8	International	04	Co-Author
2	Springer Handbook of Aerogels, 1777 pages	Springer, ISBN:978-3-030-27321-7	International	05	Co-Author

IV. Design of new / revised curricula and courses

SN	Name of Programme where curricula introduced	Title of new curricula and courses	Specify ICTs resources: Web link if any	Date of approval from authority	Date of implementation
1	B. Sc.	i) Reformulation of B. Sc. I & II syllabi with additional component ii) Certificate course: Solar Power Installation, Operation and Maintenance	-	B. Sc. I & Certificate course : 05/10/2021 B. Sc. II : 10/05/2022	Certificate course and B. Sc. (NEP pattern) June 2023
2	B. Sc.	Reformulation of B. Sc. III and finalization of B. Sc. II syllabi as per NEP	-	09/04/2025	June 2025

V. Research guidance

Sr. No.	Degree	Number of Candidate Enrolled	No. of Thesis Submitted with dates	No of Candidate Degree Awarded with dates
1	M. Phil./ P.G. Dissertation	15	04 : 05/05/2018 02 : 11/09/2020 03 : 08/07/2021 03 : 22/07/2022 04 : 30/07/2024	04 : June 2018 02 : March 2020 03 : May 2021 02: Dec. 2022 01: June 2023 03 : March 2024

VI. (a) Research Projects Completed

Sr. No.	Title of Project	Sponsored Agency	Date of Completion	Whether PI/Co-PI	Grant Received (Rs.)
1	Development of zirconia aerogels dried at ambient pressure for industrial and domestic applications [SB/FTP/PS030/2014]	Science & Engineering Research Board (SERB)	15/04/2018	PI	31,00,000/-
2	Photoelectrode development for photoelectrochemical water splitting using 3D(Mo,W)S ₂ /graphene oxide (GO) aerogels [DST/WOS-A/PM-8/2019]	Department of Science & Technology (DST)	31/05/2024	PI	34,24,522/-

(b) Research Projects Ongoing

Sr. No.	Title of Project	Sponsored Agency	Date of Starting	Whether PI/Co-PI	Grant Received (Rs.)
1	Designing and Exploration of aerogel embedded micro-nano fibrous web structures	Defence Research & Development Organization (DRDO), Kanpur	23/05/2025 (3 years)	PI	25,00,000/- (First installment Rs. 7,50,000/-)

VII. Policy Document

Sr. No.	Title of Policy Document	Name of Submitted Agency	International / National/ State	Policy Document Number	Date of Acceptance
1	MoU between PAH Solapur University and AMRC, Yonsei University, Republic of Korea	PAH Solapur University	International	-	10/05/2024

VIII. Awards/Fellowships

Sr. No.	Name of Award Fellowship	Date Received	International / National	Name of Awardees Academic body/Association
1	Research Appreciation in Top Researcher list	2021 to 2025	International	AD Scientific World Ranking
2	Research Fellow Award	15/03/2024	International	INTI International University, Malaysia.
3	Young Researcher Award	26/02/2022	International	Engineered Science Publisher, USA
4	Best oral presentation Award	06/12/2020	International Conference	Engineered Science Publisher, USA
5	Woman Scientist - A	11/02/2020	National	Department of Science and Technology (DST), Govt. of India
6	Best oral presentation Award	08/12/2016	International Conference	Rajeramrao College, Jath, India
7	Young Scientist	28/08/2014	National	Science & Engineering Research Board (SERB), Govt. of India
8	Brain Korean-21 Researcher	05/08/2011	International	Division of Humantronics Information Materials, Seoul, Republic of Korea
9	Dukhtar-E-Millat Award	29/04/2011	National	Khidmat-E-Khalque Organization of India
10	Senior Research Fellowship (SRF)	08/03/2010	National	Council of Scientific & Industrial Research (CSIR), Govt. of India
11	Senior Research Fellowship (SRF)	19/09/2009	National	Department of Science and Technology (DST), Govt. of India
12	Junior Research Fellowship (JRF)	13/09/2007	National	Department of Science and Technology (DST), Govt. of India
13	The Chakravarti Grahanirman Sanstha Award	07/01/2006	College level	Dayanand College of Arts & Science, Solapur
14	Certificate of Merit in Physics	12/02/2005	College level	Walchand College of Arts & Science, Solapur

IX. Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference Proceedings

Sr. No.	Title of Presentation in Academic Session	Title of Conference/ Seminar etc.	Resource Person/ Paper presentation	Name of Organizer	International (Abroad/within Country)/ National
1	Ambient pressure dried zirconia aerogels	5th, International e-conference on 'thin film deposition, characterization and applications (TDCA-2024)' (online)	Paper Presentation (2025)	ES Publisher, USA	International (within Country)
2	Synthesis of yttria doped zirconia aerogels via cost-effective ambient pressure drying route	3 rd International conference on Green Sustainable Technology and Management	Paper Presentation (2024)	INTI International University, Malaysia	International (Abroad)

3	Ambient pressure dried zirconia xerogels and aerogels using various catalysts	6 th International Conference on Advances in Material Science (online)	Paper presentation (2021)	Raje Ramrao College, Jath, India	International (within Country)
4	Synthesis and applications of ambient pressure dried inorganic aerogels	International e-conference on Materials Science and Nanotechnology	Invited Lecture (2020)	Dayanand Science College, Latur, India	International (within Country)
5	Zirconia coatings prepared using various organosilanes by co-precursor sol-gel method for self-cleaning purpose	1st Asian e-conference on Engineered Science	Paper presentation (2020)	ES Publisher, USA	International (within country)
6	Transparent Hydrophobic Zirconia Films using Glycerol as DCCA by Spin Coating Technique	5 th International Conference on Advances in Material Science (online)	Paper presentation (2020)	Raje Ramrao College, Jath, India	International (within country)
7	Influence of glycerol as DCCA on structural, morphological, optical and hydrophobic properties of spin coated zirconia films	International conference on "Multifunctional and hybrid materials for energy and environment"	Paper presentation (2020)	YCIS, Satara, India	International (within country)
8	Influence of various sol-gel parameters on the properties of sulfuric acid chelated zirconia aerogels dried at ambient pressure	4 th International Conference on Advances in Material Science (online)	Paper presentation (2020)	Raje Ramrao College, Jath, India	International (within country)
9	Preparation of sodium silicate-based Aerogels using a two-step sol-gel process and ambient pressure drying	3 rd International conference on Advanced Materials and Applications	Paper presentation (2019)	Raje Ramrao College, Jath, India	International (within country)
10	Synthesis and textural characteristics of alumina-zirconia composite aerogels via ambient pressure drying	2 nd International conference on Advanced Materials and Applications	Paper presentation (2017)	Raje Ramrao College, Jath, India	International (within country)
11	Some characteristics properties of chemically grown Cd _{1-x} Zn _x Se thin films	3 rd International Conference on Emerging Technologies: Micro to Nano	Paper presentation (2017)	Solapur University, Solapur, India	International (within country)
12	Influence of PVP concentrations on the microstructural characteristics of BaTiO ₃ and SrTiO ₃ nanoparticles: A comparative study	1 st International conference on Advanced Materials and Applications	Paper presentation (2016)	Raje Ramrao College, Jath, India	International (within country)
13	Preliminaries studies on Cd _{1-x} Mn _x Te thin films	International conference on "Applied science and engineering and technology"	Paper presentation (2016)	Sri Sairam College of Engineering, Bengaluru, India	International (within country)
14	Synthesis and applications of inorganic aerogels	National conference on "Materials for Energy conversion and storage"	Resource Person (2016)	Mahatma Phule Mahavidyalaya, Pune, India	National
15	Influence of ligand concentrations on the microstructural	International conference on "Materials Science and Ionizing Radiations"	Paper presentation (2016)	Shivaji University, Kolhapur, India	International (within country)

	characteristics of BaTiO ₃ and SrTiO ₃ nanoparticles				
16	Cost-effective synthesis of ultrafine BaTiO ₃ nanoparticles: Some structural and morphological observation	2 nd Conference on Physics and Technology of Sensors	Paper presentation (2015)	CMET, Pune, India	International symposium (within country)
17	Synthesis of CNT doped sodium silicate based aerogels via ambient pressure drying	National Seminar on Physics of Materials and Material based Device Fabrication	Paper presentation (2011)	Shivaji University, India	National
18	Optical, crystallographic and IR spectral studies of PbS nanocrystals doped in silica matrix synthesized by sol-gel technique	39 th National Seminar on Crystallography	Paper presentation (2010)	University of Jammu, Jammu	National seminar
19	Synthesis of low cost sodium-silicate based subcritically dried aerogels with reduced processing period by employing shaking and doping	National Seminar on Advanced Materials organized by Shivaji University, India	Paper presentation (2010)	Shivaji University, India	National seminar
20	Water-glass based translucent hydrophobic aerogels prepared using NH ₄ F and various	National Seminar on Advanced Synthetic Methodologies and Functional Materials	Paper presentation (2009)	Shivaji University, India	National seminar
21	Influence of various processing parameters and protic solvents on ambiently dried water-glass based aerogels	International Conference on Sol-gel Processes for Advanced Ceramics organized by	Paper presentation (2009)	Convention Center, Tamilnadu	International (within country)
22	Synthesis of water-glass based aerogels with reduced processing period by employing shaking method dried at ambient pressure	International Workshop on Molecular/Organic Electronic Devices	Paper presentation (2009)	Guru Nanak Dev University, Amritsar, India	International workshop (within country)
23	Ambiently dried sodium silicate based hydrophobic silica aerogels for thermal insulation	New Generation Composites and Hybrid Materials: Concepts to Application	Paper presentation (2009)	MRSI, Kolkata, India	National symposium
24	Water-glass based translucent hydrophobic aerogels prepared using NH ₄ F and various silylating agents by subcritical drying	International conference on Nanomaterials and Applications	Paper presentation (2008)	Shivaji University, India	International (within country)
25	Effect of water exchange process and silylation period on hydrophobicity of the ambient pressure dried silica aerogels using sodium silicate precursor	Materials for Hostile Environments (19 th Annual General Meeting)	Paper presentation (2008)	MRSI, Thiruvananthapuram, India	National symposium
26	Physicochemical properties of silica aerogels prepared using low cost precursor by ambient pressure drying for commercial purpose”	DAE Solid State Symposium	Paper presentation (2007)	University of Mysore, India	National symposium

27	Effect of various sol-gel parameters on water-glass based silica aerogels synthesized by ambient pressure drying method	International conference on Advanced Materials and Applications	Paper presentation (2007)	Shivaji University, Kolhapur	International (within country)
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X. Guest Lectures at colleges

1. Guest lecture for Physics M. Sc. program dated 01/08/2017 in Physics Department of Rajaram Ramrao College, Jath, Maharashtra, India
2. Guest lecture (online) entitled "Future Opportunities in Physics" dated 19/01/2021 in Vasundhara Science & Art's Mahavidyalaya, Jule Solapur, Solapur, Maharashtra, India.
3. Guest lecture (online) entitled "Origin of Quantum Mechanics" dated 14/01/2021 in Physics Department of Shri Shahu Chhatrapati Shikshan Sanstha, Kolhapur, Maharashtra, India.

XI. Employments (particulars of past and current positions)

Employer	Position held	Date of Joining	Date of Leaving	Duration
Department of Science and Technology (DST), Govt. of India	Junior Research Fellow (JRF)	19/09/2007	13/12/2009	2 years 2 months 24 days
Department of Science and Technology (DST), Govt. of India	Senior Research Fellow (SRF)	14/12/2009	31/03/2010	3 months 14 days
Council of Scientific and Industrial Research (CSIR), Govt. of India	Senior Research Fellow (SRF)	01/04/2010	10/02/2011	10 months 10 days
Division of Humantronics Information Materials, South Korea	Researcher	01/09/2011	28/02/2013	1 year 6 months
School of Physical Sciences, Solapur University, Solapur	Assistant Professor (Full time)	08/07/2014	15/04/2015	9 months 7 days
Science & Engineering Research Board (SERB), Govt. of India	Young Scientist	16/04/2015	15/04/2018	3 years
School of Physical Sciences, Solapur University, Solapur	Assistant Professor (Full time)	27/07/2018	30/04/2019	9 months 3 days
School of Physical Sciences, PAH Solapur University, Solapur	Assistant Professor (Full time)	08/07/2019	30/04/2020	9 months 22 days
Department of Science and Technology (DST), Govt. of India	Women Scientist - A	01/12/2020	31/05/2024	3 years 6 months
School of Physical Sciences, PAH Solapur University, Solapur	Assistant Professor (Full time)	13/08/2024	31/05/2025	9 months 18 days
School of Physical Sciences, PAH Solapur University, Solapur	Assistant Professor (Full time)	07/07/2025	Till date	-

XII. Professional Training Received

Sr. No.	Nature of Training	Duration	Organization where training was provided
1	Two weeks ISTE short term training course on Engineering Physics conducted by IIT Bombay	8-18, December 2015	Walchand Institute of Technology (WIT), Solapur
2	One day workshop on "Indian patenting & filing procedures" organized by RUSA and solapur university	25, August 2016	Solapur University, Solapur,
3	Two days training program on "Research for Resurgence" organized by RUSA (Maharashtra) and Solapur University.	19 & 20, July 2018	Solapur University, Solapur
4	Three days training workshop on "Capacity building for women managers in higher education" organized by RUSA, Solapur University	25-27, October 2018	Solapur University, Solapur
5	One day workshop on "Revised Accrediation Framework of NAAC" organized by PAH Solapur University and NAAC, Bengaluru	22, July 2019	Punyashlok Ahilyadevi Holkar Solapur University
6	Online course on "Learning Physics Through Simple Experiments" conducted by IIT Kanpur	2 April to 10 June, 2020	Online mode
7	Online short term course on "Physics in Daily Life" conducted by Swa. Sawarkar Mahavidyalaya, Beed	25 April to 1 May, 2020	Online mode
8	National Level Online Webinar on "How to create Educational Videos" organized by Knowledge Publication and YouTube Channel	24, May 2020	Online mode
9	National webinar on "Getting Ready for NAAAC" organized by IQAC, MIT World Peace University, Pune	31 st May, 2020	Online mode
10	National webinar on "GER in Education and Developing Countries" organized by IQAC, PAH Solapur University, Solapur	29, June 2020	Online mode
11	One week short term training program on "E-Content Design and Development for Effective Online Teaching" organized by IQAC, PAH Solapur University, Solapur	17 - 22, July 2020	Online mode
12	National webinar on "Revised Accrediation Framework of NAAC" organized by IQAC, PAH Solapur University, Solapur	27, July 2020	Online mode
13	National webinar on "MSMEs and Role of Universities" organized by IQAC, PAH Solapur University, Solapur	12, September 2020	Online mode
14	National webinar on "Implementation of National Education Policy 2020" organized by IQAC, PAH Solapur University, Solapur	25, September 2020	Online mode
15	Three days online workshop on "English Communication and Presentation Skills" organized by PAH Solapur University	12-14, October 2020	Online mode
16	One week Faculty Programme on "Academic and Professional Development" organized by IQAC, Yashvantrao Chavan Institute of Science, Satara	19-24, October 2020	Online mode

17	Three days online workshop on “Experimental Methods in Analytical Electrochemistry and Advanced Chemical Engineering” organized by Ujjain Engineering College, Ujjain	23-25, November 2020	Online mode
18	Four days “UGC-STRIDE Online Lecture Series Program” organized by Shivaji University, Kolhapur	7-10, April 2021	Online mode
19	International webinar on “ Stories from Materials Science Playground and Practical Applications” organized by PAH Solapur University, Solapur	16, December 2021	PAH Solapur University, Solapur
20	Five days training programme on “Women in Leadership” organized by PAH Solapur University, Solapur	17-21, April 2023	PAH Solapur University, Solapur
21	Participated in online quiz on ‘Atomic, Molecular and Nuclear Physics’ organized by School of Physical Sciences, PAH Solapur University, Solapur.	-	Online mode
22	Participated in online “Covid-19 General Awareness Program 2020” organized by IQAC, PAH Solapur University.	-	Online mode

XIII. Academic contribution

1. IT coordinator and committee member of criteria – VI of 2 nd cycle of NAAC committee in PAH Solapur University, Solapur.
2. Coordinator of English Communication Skill course organized by PAH Solapur University during 2018-2020 in PAH Solapur University, Solapur.
3. Evaluator/Re-evaluator for theory papers of M. Sc Physics in PAH Solapur University, Solapur.
4. Assessment of theory papers of M. Sc. Physics in PAH Solapur University, Solapur.
5. Internal Examiner during the examination in PAH Solapur University, Solapur.

XIV. Membership of Professional Bodies

Name of the Body	Statuses of Membership: Life/Annual
The Indian Science Congress Association (ISC)	Life Membership No. L26696
Material Research Society of India (MRSI)	Life Membership No. LMB2562

XV. Technical Skills

- ❖ Handling and operating proficiencies of chemical stations with fume hood, spray, spin and dip coating techniques for thin films deposition, PID controlled oven, programmable high temperature box and tube furnaces, hydrothermal technique, Centrifuge machine, orbital shaker, ball milling, ultrasonic cleaner etc.
- ❖ Operating proficiency of the characterization instruments: Field Emission Scanning electron microscopy (FESEM), Energy Dispersive Spectroscopy (EDS), optical microscope, UV-VIS spectrophotometer, FT-IR spectrometer, X-ray diffraction spectrometer, contact angle measurement, thermal conductivity meter, surface profiler, BET surface area analyzer, humidity measurement unit etc. Computer proficiency of using different softwares like Excel, Origin.

XVI. Particulars of other activities, if any : (Except teaching & Research)

a) Extension work carried out :
<ul style="list-style-type: none">➤ Installation and testing of the sophisticated equipment procured in the research projects. All the master and research students are using these facilities.➤ Assisted 15 M. Sc. students for completion of the research dissertation required for partial fulfillment of their master degree.➤ Guided M. Sc. students for the poster presentation in an international conf. 2017 as well as in National Science Day 2024.➤ Acting as a reviewer of more than seven reputed international journals.➤ Received royalty (2012-2019) from self-authored book on aerogels.➤ Given a talk (online) on aerogels invited by Shiva Texyarn Limited, Tamilnadu.
b) Co-curricular and extra-curricular activities carried out :
<ul style="list-style-type: none">➤ Coordinator of English Communication Skill course organized by PAH Solapur University during 2018-2020 in PAH Solapur University, Solapur.➤ Evaluator/Re-evaluator for theory papers of M. Sc Physics in PAH Solapur University, Solapur.➤ Internal Examiner during the examination in PAH Solapur University, Solapur.➤ IT coordinator and committee member of criteria – VI of 2nd cycle of NAAC committee in PAH Solapur University, Solapur.➤ Examiner for Poster session of International Conference on Advances in Materials Science, 07-08, Dec. 2016.➤ Invited Guest lecture on Crystal defects (Sep. 2016) by Department of Physics, Raje Ramrao College, Jath.➤ Invited Guest lecture on Future Opportunities in Physics (Jan 2021) by Vasundhara Kala Mahavidyalaya, Solapur.➤ Invited Guest lecture on Origin of Quantum Mechanics (July 2021) by Shri Shahaji Chhatrapati Mahavidyalaya, Kolhapur.➤ External examiner (July 2025) for B.Tech. practical examination in MIT Vishwapravayag University, Solapur.
c) Activities concerning corporate-like such as Hostel-wardenship, Guidance bureau, Gymkhana, NSS, NCC.
<ul style="list-style-type: none">➤ Committee member for the selection of female students in “Muli Shikva Samaj Ghadva” scheme for the year 2019-2020, 2025 under Solapur University.➤ Organizing committee member in:<ol style="list-style-type: none">i. National Science Day and NET/SET workshop in 2025ii. One day state level workshop on ‘AI and Machine Learning (AIML – 2024)iii. National e-conference on Materials for Emerging Technologies in 2021iv. Solapur University Yuva Spandan in 2018-19v. Interaction Meet of Physics-Electronics Teachers and Students in 2020vi. Workshop on “Untold History of United State and Concept of Nuclear Energy” in 2018.

I, hereby declare that the above given information is true with the best of my knowledge.

Place: Solapur

Date: 11 December 2025



Dr. Uzma K. H. Bangi