

RESEARCH ACTIVITIES

DR. MADHURI PURANDARE

Paper Published/Presented:

- Bianchi Type-III Cosmological Model with Quadratic Equation of State. The African Review of Physics (2015) 10: 0009 65
- Early Deceleration and Late Time Accelerating Bianchi Type-V Cosmological Model with Quadratic Equation of State in General Relativity. International Conference on Frontiers in Mathematics 2015 March 26-28, 2015, Gauhati University, Guwahati, Assam, India
- Plane Symmetric Cosmological Model with Quadratic Equation of State Bulg. J. Phys. 42 (2015) 20–28
- Higher Dimensional Spherically Symmetric Cosmological Model with Quadratic Equation of State. European International Journal of Science and Technology ISSN: 2304-9693
- Bianchi type-I cosmological model with quadratic equation of state. Astrophys Space Sci (2015) 357:20
- Bianchi Type-VIh Cosmological Model with Quadratic EOS in $f(R, T)$ Theory in International Journal of Scientific Research in Science and Technology in Jan 2021.

List of Conferences, seminars, workshops, guest lectures organized/ attended

Webinars, FDPs, STTPs, TEQIP attended

- One week FDP on “Linear Algebra and its applications” during 27 Feb-3rd March 2023 organised by Vellore Institute of Technology, Chennai
- Two days FDP on “Adoption of NEP modules in Academic Curriculum” from 30 Nov-1 Dec 2022 Organised by Department of Computer Science & Engineering, CUIET, Chitkara University, Punjab

As a resource person

- Appointed as VC nominee by SPPU for BoS of Applied science and Humanities department at PCCOE, Pune
- Nominated as Subject Expert for University Staff Selection Committee by university of Mumbai on 12th August 2022
- Appointed as a reviewer for Technical book translation by Dr. Babasaheb Ambedkar Technological University and AICTE
- Appointed as Subject Expert for Mathematics by the Vice Chancellor of SPPU on 18th March 2023 .
- Appointed as a Mathematics paper setter for MPSC exam in June 2023

DR. VIKRAM ATHALYE

Invited talks and Visits Abroad:

- Offered an appointment as a visiting scientist at Institute of Quantum Computing (IQC) at University of Waterloo and received CAD \$ 15000 from IQC-UW - as Honorarium + to-and-fro travel expense reimbursement (CAD \$ 2000) from May 1, 2012 to 31 July, 2012.
- Invited to give a talk in the international conference 'The Time Machine Factory 2015', organized by University of Turin, Italy (25-28 October 2015). name of Talk was: 'Space time: pre-existing classical label vs. acquired quantum observable' on

Oct. 26, 2015.

- Invited talk (The de Broglie – Bohm theory & the problem of Time) delivered at the conference entitled “Quantum Information Revolution – Impact to Foundations” at the Linnaeus University, Vaxjo, Sweden, from 9 to 14 June 2019.
- Fully sponsored visit as faculty to “Faculty of Business Administration” of Memorial University St. John’s, Canada from 11 to 15 November 2019.

Paper Published / Presented:

- Published a Paper entitled " Unifying Perspectives: All-encompassing Reality vs. All-inclusive Physics, in an International Conference, Journal of Physics: Conf. Series (IoP Publishing), Conference series 2948 012012 , Feb 2025, Scopus.
- Published a Paper entitled "Causal Viewpoint and Ensemble Interpretation: From Physics to the Social Sciences, in an Philosophical Transactions A, June 2023 issue, 183, SCL.
- Superpositions of Chiral States in the presence of electric dipole, magnetic dipole and electric quadrupole interactions, J. Chem. Phys. 122, 174302 (2005) Vikram Athalye & Arvind Kumar.
- Stationary states of pyramidal molecules coupled to an electromagnetic field below and above the critical pressure, J. Phys. A: Math. Gen. 38, 8239 (2005) Vikram Athalye & Arvind Kumar.
- Decoherence of superposition of molecular chiral states due to Rayleigh scattering, J. Phys. B: At. Mol. Opt. Phys. 39, 2633 (2006) Vikram Athalye & Arvind Kumar.
- Evolution of coherence between the Jaynes – Cummings Eigenstates in the presence of repeated occupancy measurements: The Case of Resonant Coupling arXiv.org: quant-ph/0710.3662v1 (2007) Vikram Athalye.
- Investigation of the Leggett-Garg Inequality for Precessing Nuclear Spins, Vikram Athalye, Soumya Singha Roy, and T. S. Mahesh, PHY. REV.LETT. 107, 130402 (2011).
- Socio-Economic Sciences: Beyond Quantum Math-like Formalisms Quantum Rep. 2021, 3(4), 656-663; Vikram Athalye , Emmanuel Haven.

DR. MANISHA JAIL

- Published a Paper entitled " Biomass and Bio-Based Products: Opportunities, Challenges, and Future Prospects in India, in an International Conference in proceedings
- Poster Published on Herbal Pesticides in International conference on Business Opportunities in life sciences, organized by Modern college of arts, science and commerce, Shivajinagar, Pune on : 28th to 30th Jan 2012.
- Paper Published on Algae as a source of biofuel An Overview in National conference on Energy and sustainable development organized by College of Engineering, Shivajinagar, Pune on : 28th to 29th Feb. 2012.
- Poster Published on Gas chromatographic methods used for synthetic pyrethroids and organophosphate pesticides analysis : An overview in International conference on Global opportunities for latest developments in chemistry and technology 2014 (GOLD-CT-2014) organized by North Maharashtra University, Jalgaon on 6th Feb to 8th Feb 2014
- Poster Published on Study of impact of pesticides on soil microflora in National conference on Advances in chemical sciences with special reference to molecular spectroscopy, material science and organic electronics organized by Fergusson College, Deccan Gymkhana, Pune on 19th and 20th Dec. 2014.

- Studies on physic-chemical properties of commercially available EC formulations of cypermethrin and chlorpyrifos pesticides : International Journal of Engineering Research and Technology (IJERT) ISSN: 2278-0181 Vol.2 Issue 8, August-2013
- Evaluation of effect of different pesticides on pigeon pea using statistical tools in field experiment.: IOSR Journal of Environmental Science, Toxicology and Food Technology e-ISSN:2319-2402, p-ISSN: 2319-2399 Volume: 8 (Version-1)
- Studies On The Impact Of Pesticides On Soil Microbial Respiration : International Journal of Plant, Animal and Environmental Sciences(IJPAES) ISSN-2231-4490, Volume-5, Issue-1, Jan-March-2015, Coden : IJPAJX-USA
- Bio- efficacy and Relative Performance of Chlorpyrifos and Cypermethrin against Pod Borers Infesting Pigeon Pea. IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)e-ISSN:2278 - 3008, p - ISSN:2319-7676. Volume 13, Issue 2 Ver. III (Mar. – Apr. 2018), PP 80- 84

List of Conferences, seminars,workshops, guest lectures organized/ attended

- Workshop attended on Modern Trends of Design Thinking, Sciences and Professional SKills in Engineering, organized by MIT-ADT, Pune, during 11 to 22 Dec 2023

Webinars, FDPs, STTPs, TEQIP attended

- FDP on "Indian Knowledge system", held at online organized by Dept. of First year Engg., Anantrao Pawar College of Engg & Research, Pune, during 10 Jun to 14 Jun 24
- FDP on " Modern Trends of design thinking, Sciences and Professional skills in Engineering, during 11 to 22 Dec 2023
- FDP on "Indian Knowledge System, during 10 to 14 Jun 2024
- One week FDP on Recent Advancement in science and technology, online organized by Dept. of Basic science, Alliance college of Engg. and design, Alliance University, Bangalore, India. during 6th March -10th March 2023

As a resource person

- Invited as External Subject expert for Local staff selection committee organized by AISSMS and IOIT, Pune on 1st Aug 2024
- Invited as External resource person for Faculty orientation Program for Engg Chem teachers, organized by PES's Modern college of Engg, Pune on 14 Aug 2024
- Invited as External resource person for Faculty orientation Program for Engg Chem teachers, organized by SKNCOE, Pune on 21 Aug 2024
- Invited as Subject Expert for Local staff selection committee, organized by AISSMS & IOIT, Pune 29 June 2023

Book Published

- Engineering Chemistry (SPPU: 2024 pattern), Technical Publication, book chapter 2, ISBN:978-93-5585-627-2

PROF. NAMRATA KARANDIKAR

Patents:

- Indian patent has been granted for an invention entitled “A method and an apparatus for data compression including encryption for file Transfer” Patent No. 285348.

Paper Published/ Presented:

- Presented a paper on “Concept of Iterative functions in classical Sanskrit Tests on Mathematics” in and international conference AI-ML- Applications for Engineering & Technology organised by IEEE Pune chapter CCOEW on 16 Jan to 17 Jan 2025.
- Published a Paper entitled " Use of Assignment mode for effective assessment of students to achieve course outcomes, International Journal, Graduate Research in Engineering and Technology(GRET), Voi.1, Iss.8 (2022), NON-SCOPUS
- Presented a paper at NCRTAM 2003, in National Conference on Recent trends in Applied Mathematics at Coimbatore in May 2003.

List of Conferences, seminars,workshops, guest lectures organized/ attended

- Attended International Conference on AI-ML- Applications for Engineering & Technology (ICAET-25) held on 16 Jan to 17 Jan 2025 at CCOEW, Pune.
- Online Workshop on NEP-2020 Implementation Plan under the component Technology use and Integration, organized by UGC HRD, SPPU, 8 Feb 2023

Webinars, FDPs, STTPs, TEQIP attended

- STTP on “Role of Mathematics in new Education Policy-2020” , held at COEP Technological University, Pune during 3rd Aug2023 to 5th Aug 2023.
- STTP on “Introduction to Traditional Knowledge Intellectual Property & People's Rights,” organized by the Indian Knowledge Systems (IKS) Division, Ministry of Education, and CSIR-Traditional Knowledge Digital Library (TKDL) Unit, Ministry of Science and Technology, held from 7th Aug 2023 to 11th Aug 2023.
- STTP on “Smart sensing and Intelligent Systems” ISTE approved held at Instru dept CCOEW, Pune during 26-Aug-2024 to 30 Aug 2024.
- FDP on “Question paper Design for OBE “held at NITTTR exn centre Pune organized by NITTTR, Bhopal, during 22-Jul-2024 to 27 Jul 2024.
- FDP on " "Implementation of Indian Knowledge System (IIS) for NEP 2020" during 8 to 9 Aug 2023
- FDP on " "NATIONAL EDUCATION POLICY (NEP)-2020 & ITS IMPLICATIONS IN ENGINEERING EDUCATION, during 9 Oct to 13 Oct 2023
- One week FDP on Linear Algebra and its Applications , online organized by Vellore Institute of Technology, Chennai during 27 Feb -3 March 2023.
- 2 days National level FDP on Mathematics behind AI/ML, online organized by MIT Academy of Engg., Alandi, during 17th-18th May 2023

As a resource person

- Invited as External resource person for External Paper setter for Chemistry Sem I End sem Exam, organized by MIT WPU , on 20 Oct 2024

PROF. MANJEERI KOLHATKAR

Paper Published/ Presented:

- Presented a Paper entitled " Implementation of NEP-Architectural Expression with IKS, at the Council of Architecture's International Conference, during 15 to 17 Feb 2024

List of Conferences, seminars,workshops, guest lectures organized/ attended

- Workshop on National Education Policy and Indian Knowledge Systems, organized by, Bhandarkar Oriental Research Institute, on 21 Aug 2023
- Workshop on Train the Trainers, organized by NIST(National Institute of Skills Training, during 1 to 10 Aug 2023

Webinars, FDPs, STTPs, TEQIP attended

- STTP on "Emerging Trends in Civil Engineering", held at online organized by Dr. Daulatrao Aher College of Engineering, Karad, during 27 Jan to 31 Jan 2025
- Soft Skills-Train the Trainer Course, online organized by National Institute of Skills Training during 12thg August 2023

DR. MALINI BAPAT

Research guidance UG:

- Durga Tilak T.E. (Mech) for Eaton Awards Rs 60,000/-, (Dots, Spots & Glow. A Green Initiative – quantum dots)

Projects carried out:

- BCUD Research grant of Rs. 1,10,000/- for a project entitled "Biosynthesis of nanoparticles and its applications" Status: Completed (2012- 14).
- Working towards better photoanodes and dye-sensitizers for efficient solar cells Funded By: Cummins College of Engg for Women, Pune , Status:- Completed (2014-15).
- Principal Investigator for the project: 'Extraction of Si from rice husk' funded by Swaroop Agrochemical Industry, Nashik, Amount Rs.1,56,874/- for a duration of one year (Jan 2019-2020).

Patents:

- Inventor for Indian Patent awarded in July 2020 entitled "A method to treat bacterial blight" Patent No.340233.

Research Funding & Consultancy

- Cummins Research Fund of Rs. 1,72,000/- in Feb 25 for duration of 2 years ,
- Principal Investigator for Industry sponsored Consultancy Project on 'Quick effective method for nanoparticles for Agrochemicals', for Swaroop Agrochemicals, for Rs. 2,54,000/- July 2015-16 Nashik. Status :- Completed.

Research Publications:

- Published a Paper entitled " A Comparative study of approaches towards extraction of nanocellulose from green sources: A theoretical framework for green methodology [Awarded Best Oral paper presentation in Environmental and Analytical section], in an National Conference, Abstract Book for XXXXIII Annual Conference of Chemists XXXXIII Annual Conference of Chemists, 26 th Dec 2024
- Published paper entitled, "A Soft Solution Process to Synthesize Nanocrystalline Barium Zirconate via Reactive Solid State Precursors," Anjali A. Athawale and Malini Bapat at the 2nd International Conference on Materials for Advanced Technologies (ICMAT 2003) in Suntec, Singapore, on 11th Dec., 2003.
- A Paper entitled, "Acoustic wave stimulated novel synthesis route for nanosized ferroelectric barium titanate" by Anjali A. Athawale, Malini S. Bapat and Vijay B. Shinde was Published at the Metavista, (Pune chapter) at the Govt. College of Engineering, Pune on 16th Feb., 2005.
- Published a poster entitled, 'A designed hydrothermal synthesis of Nanocrystalline lead titanate by means of reactive precursors' by Anjali A. Athawale, Malini S. Bapat, at the International Conference on Nanoscience and Nanotechnology (ICONSAT), organized by DST and IIT, Delhi at the India Habitat Centre, N. Delhi from the 16th-18th Mar. 2006.
- Paper entitled, 'Nanocrystalline lead zirconium titanate by means of hydrothermal synthesis' Published by Anjali A. Athawale and Malini S. Bapat at the 'National Seminar on Advanced Electroceramics'(NSAE-2006) organized by the DRDO Center for Piezoelectric Devices, ARDE, Pashan, Pune on the 5th & 6th May 2006.
- Poster presentation entitled, " Nanostructured Titanate powders by Hydrothermal route" (B-186) by Anjali A. Athawale and Malini S. Bapat at International Conference-NANO-2006 in IISc., Bangalore held in Oct. 2006.
- Poster presentation entitled, " BaSnO₃ and Au-BaSnO₃ nanorods; Application as CO gas sensor" Anjali A. Athawale, Malini S. Bapat and P.A. Desai, in the International Conference on Advanced Nanomaterials (ANM) at IIT Powai, Mumbai from 8-10 Jan. 2007.
- Poster presentation of paper by Anjali A. Athawale, Malini S. Bapat and P.A. Desai, entitled, " Hydroxide directed novel route to synthesize nanosized cubic ceria (CeO₂)" at International Conference on Nanomaterials and its Applications (ICNA 2007) held from 4th-6th Feb. 2007 in NIT, Tiruchirapalli.
- Oral Paper presentation, "Effect of mineralizer on hydrothermal synthesis of perovskite oxides" at the 10th International Conference on Advanced Materials (IUMRS-ICAM 2007) held in Bangalore, India from 8th-13th October, 2007.
- Oral Paper presentation by M. Murugan, V.K. Kokate, A.A. Athawale, M.S. Bapat and AHM Alhousami entitled, " Nanoparticles of barium and strontium titanates/Epoxy resin as microwave absorbers" at the 10th International Conference on Electromagnetic Interference and Compatibility (INCEMIC 2008) held at Nimhans convention centre, Bangalore, India on 26-27th Nov., 2008.
- Oral Paper presentation M. Murugan, V.K. Kokate, A.A. Athawale, M.S. Bapat and AHM Alhousami entitled, "Composites of barium titanate/epoxy resin synthesized in different concentrations as microwave absorber" at the IEEE International Symposium (IEEE 2008) on microwaves held in Bangalore from 3-6 Dec. 2008.
- Poster presentation "to relate the efficacy of a natural and synthetic sensitizer on a DSSC" at the International Photovoltaic Solar Energy Conference (IPSEC) - Solar Asia 2015 from 30th July- 1st Aug , 2015 at Dept. of physics, University of

Pune.

- A soft solution process to synthesize nanocrystalline barium zirconate via reactive solid state precursors. Athawale, Anjali A.; Bapat, Malini., *Journal of Metastable and Nanocrystalline Materials* (2005), 23, 3-6. Publisher: Trans Tech Publications Ltd.
- A rapid hydrothermal synthesis route for nanocrystalline SrZrO₃ using reactive precursors. Athawale, Anjali .; Chandwadkar, Asha; Karandikar, P.; Bapat, Malini, *Materials Science & Engineering, B: Solid-State Materials for Advanced Technology* (2005), B119(1), 87-93. Publisher: Elsevier B.V.
- Radiation assisted synthesis of nanosized barium zirconate. Athawale, Anjali A.; Chandwadkar, Asha J.; Karandikar, Prashant; Pasricha, Renu; Bapat, Malini S. *Department of Chemistry, University of Pune, Pune, India. Radiation Physics and Chemistry* (2006), 75(7), 755-759. Publisher: Elsevier Ltd.
- Lanthanum-Based Perovskites as Exhaust Gas Sensors: Anjali Athawale, Malini S. Bapat, Prashant K. Sahu, University of Pune, Pune, India. *Encyclopedia of Sensors, Chapter LO6, volume 5 (I-M)*, 215- 244, (2006) American Scientific Publishers.
- Synthesis of Nanocrystalline PZT by hydrothermal method: A.A. Athawale and Malini S. Bapat, *Defence Sci. J.*, 57, (2007), 35.
- Hydrothermal preparation of BaSnO₃ and Au- BaSnO₃ nanorods, A. A. Athawale, M. S. Bapat and P. A. Desai, *Journal of NanoScience and Nanotechnology*, 8,1,(2008). American Scientific Publishers.
- Hydroxide directed novel routes to synthesize nanosized cubic ceria (CeO₂) A. Athawale, M. S. Bapat, P. A. Desai, *J. Alloys and Compounds*, 484, Issues 1-2, 18 September 2009, Pages 211-217. Publisher: Elsevier Ltd.
- Barium Titanate/epoxy resin composites as Microwave Absorber Material in X-band frequency range, M. Murugan, V. K. Kokate, A. A. Athawale, M. S. Bapat and Mohammed Al Housami , *Bull. Mater. Sci.*, Vol. 33, No.6, Dec. 2010, pg. 657–662.
- Synthesis, Characterization and Evaluation of Reflectivity of Nanosized CaTiO₃ / Epoxy Resin Composites in Microwave Bands, M. Murugan, V. K. Kokate, M. S. Bapat, *Bull. Mater. Sci.*, Vol. 34, No. 4, July 2011, 699–704.
- Composites of nanosized strontium titanate epoxy resin as microwave absorber. *Journal of Electromagnetic waves and applications*, Springer, M. Murugan, M. S. Bapat, V. K. Kokate, ISSN:0920-5071(Print)1569-3937(online), 2015-16
- Evaluating green silver nanoparticles as prospective biopesticides: An environmental standpoint MS Bapat, H Singh, SK Shukla, PP Singh, DVN Vo, A Yadav, A Goyal, *Chemosphere*, Volume 286, Part 2, January 2022, 131761.

List of Conferences, seminars, workshops, guest lectures organized/ attended

- organized a guest Lecture " Launch and Lead: An exciting Session on 'To start up'", by Ms. Vidya Munde-Muller, on 03 Feb 25, 142 attendees
- organized a guest Lecture " Launch and Lead: The startup journey unfolded", by Ms. Prachi Shevgaonkar, on 20 Feb 25, 120 attendees
- Workshop on " The Art and Science of Grant Writing, organized by Cummins College of Engg., on 5 Jun 2024
- Online Workshop on NEP-2020 Implementation Plan under the component Technology use and Integration, organized by UGC HRD, SPPU, 8 Feb 2023
- Workshop on 'Ideation to Monetization' organized by Cummins College of Engineering for Women, 16 to 18 Feb 2023

Webinars, FDPs, STTPs, TEQIP attended

- STTP on " Smart sensing and Intelligent Systems", held at online, organized by ISTE approved Instru dept CCOEW, during 26 Aug to 30 Aug 2024
- "FDP on "" 3D Printed Composites: Materials, Technologies, and Applications, held at online, Organized by ""AICTE Training and Learning Academy organized by MKSSS's Cummins College of Engineering for
- Women, Pune-52""", During 6 Jan to 11 Jan 2025"
- FDP on" Outcome based Education and Application of Generative AI in Teaching and Research", during 18 to 23 March 2024
- FDP on " NEP 2020 Orientation and Sensitization Programme, during 20 to 28 May 2024
- 12 weeks NPTEL course on 'Industrial Inorganic Chemistry' online organized by NPTEL-AICTE, IIT Kharagpur,GOI during Jan-April 2023

As a resource person

- Invited as External resource person for External Paper setter for Chemistry Sem I End sem Exam, organized by MIT WPU on 23 Oct 2024
- Judge for 1st round of Business Idea competition held in Cummins College Oct. 2023
- External Senior Supervisor: Appointed by SPPU for MMCOE ,24th July-4th August 23.
- External Paper setter for Applied Chemistry at MIT-WPU, Dec 2023, May 2024
- Paper Reviewer for manuscript IPPJ-D-23-00307R1, Indian Phytopathology journal, Dec 23
- Conducted idea competition for FYBTECH and was judge for first & second round
- Invitation as Board of Studies (BoS) External Member of the B. Voc. program at PCCOE dated 9th March 2023
- Reviewer for manuscript in Journal of Applied Biology & Biotechnology-17th Feb 2023
- External Paper setter for Applied Chemistry -MIT WPU 15th May 2023

PROF. MRUNAL MOHARIR

Papers Published/ Presented:

- Real Time Measurement of Power System frequency using DSP 'national conference on smart grids, 19-21 March, 2012, organized by AISSMS, Pune.
- Real Time Measurement of Power System frequency using DSP 'international conference on electronics and communication engineering held at Pune on 15th July, 2012.
- Published a Paper entitled " Effective Implementation of Peer Review as an Active Learning Technique to Attain Course Outcome: A Case Study", published in an International Journal Journal of Engineering Education Transformations, Year 2022, Volume 36, special issue 1, SCOPUS
- Published a Paper entitled " Effective Application of One Minute Paper and Muddiest Point Technique to Enhance Students' Active Engagement: A Case Study, published in an International Journal , Journal of Engineering Education Transformations, Year: 2023, Volume: 36, Issue: 3, SCOPUS

PROF. VISHAL DEORE

Paper Published/ Presented:

- Published a Paper entitled " Assessing The Impact of IEEE Cloud Computing Platform Training on Students' Knowledge: A Pre- and Post-Study at MKSSS Cummins College of Engineering for Women, Pune. in an International Journal Library Progress International, Vol 44 Issue 3, July 2024,
- Published a Paper entitled " Role Of Various Higher Education Discipline Students In Indian Rural Development Through Unnat Bharat Abhiyan Mission – Theoretical Interdisciplinary Approach, in an International Journal Library Progress International, Vol 44 Issue 3, July 2024,.
- Published a Paper entitled " ADDITION OF MASKED ACYL ANION TO α , β UNSATURATED ESTER IN SYNTHESIS OF 4-, 5-, 6- KETO CARBOXYLIC ESTERS in an International Journal U.P.B. Sci. Bull., Series B, Vol 86 Issue 3, Aug 2024.
- Published a Paper entitled " Green One-Pot Synthesis Of Disubstituted Coumarine At Room Temperature: A Practical Approach For The Large-Scale Synthesis in an International Journal African Journal of Biomedical Research, Vol 27 Issue 1S, September 2024, 1119-5096,
- Published a Paper entitled " Sustainable and Efficient Synthesis of 2-Amino-4-Aryl Quinoline-3-Carbonitriles, in an International Journal African Journal of Biomedical Research Vol 27 Issue 1S September 2024 1119-5096
- Published a Paper entitled " Decision Tree-Based Hedging: Risk and Return Analysis, in an International Journal, Library Progress International ,Vol.44 No.3, Jul-Dec 2024: P. 8008-8014 , July 2024
- Published a Paper entitled " Reflection EMI Shielding effect on Graphene/Cuo Silicon Rubber Nanocomposites Over Broad Frequency Range of 1 GHz to 20 GHz, in an International Journal, Nanotechnology Perceptions, Vol. 20 No. 4 (2024) 519-532 , July 2024, .
- Published a Paper entitled " Silicone rubber nanocomposites: Optimal graphene dosing for mechanical and electrical enhancements, in an International Journal 33 (2024) 5543–5550 , 23 October 2024,
- Published a Paper entitled on "Sliding Wear Behavior of Pineapple Leaf/Glass Fiber Reinforced Polyester Composites", in an International Journal Macromolecular Symposia, Dec, 2023, 412, , Wiley,
- Published a Paper entitled " Study on Importance, Procedure, and Scope of UNNAT Bharat Abhiyan –A Scoping Review, An International Journal ISSN 2320 – 6632, Volume-1, Issue-8, Sept 2022, Published a paper entitled "Testing of Silicon Rubber/Montmorillonite Nanocomposite for Mechanical and Tribological Performance" in an international journal Nanomaterials, 11(11), 3050 (Nov 2021),
- Effect of target span and configuration on the ballistic limit M.A. Iqbal, P.K. Gupta, V.S. Deore, S.K. Tak, G. Tiwari N.K. Gupta, International Journal of Impact Engineering 42 (2012) 11-24

List of Conferences, seminars,workshops, guest lectures organized/ attended

- Workshop on Design and Development of Micro-Scale Rural Energy Technologies, organized by Ministry of Education, IIT Delhi, 13 to 14 March 2023

Webinars, FDPs, STTPs, TEQIP attended

- STTP on " NEP 2020 orientation & sensitization plan" held at online organized by Malaviya Mission Teacher Training Centre (MMTTC), University of Calicut , During 5 Aug to 14 Aug 2024
- STTP on " Smart sensing and Intelligent Systems", held at online, organized by ISTE approved Instru dept CCOEW, during 26 Aug to 30 Aug 2024
- FDP on "ADVANCED RESEARCH METHODOLOGY", organized by MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING during 22 November – 06 December, 2022

PROF. DEEPALI KUMAWAT

Paper published

- Attended INTERNATIONAL CONFERENCE ON FUTURE ROAD OF MULTIDISCIPLINARY STREAMS (ICF MRS - 2022), organized by Roorkee Institute of Technology (RIT), Roorkee, Uttarakhand, during 21 to 22 Dec 2022

PROF. SANGITA GAMBHIR

- Published a paper entitled "Multi-Stenosis Effect on Jeffrey Fluid Model of Blood Flow", CFD Letters, vol.17 no.6, pp. 18-27, June 2025, doi: <https://doi.org/10.37934/cfdl.17.6.1827> Journal article Publication Date: 31st Dec. 2024 3.4 S. Mahajan, B.S. Veena
- Published a Paper entitled " Multi-stenosis Effect on Jeffrey Fluid Model of Blood Flow in an International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH 2023), during 2 to 3 Oct 2023

Webinars, FDPs, STTPs, TEQIP attended

- FDP on " "NATIONAL EDUCATION POLICY (NEP)-2020 & ITS IMPLICATIONS IN ENGINEERING EDUCATION, during 9 Oct to 13 Oct 2023
- FDP on " National level FDP" Improving 21st century teaching skills using Technological tools"during 22 to 26 April 2024
- One week FDP on Linear Algebra and its Applications, organized by Vellore Institute of Technology, Chennai during 27 Feb -3 March 2023.
- One week international STTP on Mathematical Modeling and Computational Software online organized by Hindustan Institute of Technology, Coimbatore during 27th March to 1st April, 2023
- 2 days FDP on Adoption of NEP modules in Academic Curriculum, Chitkara University Punjab, online organized by Chitkara University , Punjab during 30th Nov. to 1st Dec. 2022
- 3 days National level FDP on Student Centric and Interactive Teaching Strategies using Technological Tools, online organized by SAE, Kondwa, Pune during 22nd May to 24th May
- days National level FDP on Mathematics behind AI/ML, online organized by MIT Academy of Engg., Alandi, during 17th-18th May 2023
- 2 days State Level QIP Sponsored by SPPU, Pune on MOOCs: Massive Open online courses "Design Development and Usage in Academic Frame Work, online organized by MKSSS's Dr. Bhanuben Nanavati College of Architecture for Women, Karve Nagar Pune during 16th-17th Feb., 2023
- One Week(7 days) online FDP on Advanced LaTeX for Technical writing, online organized by SRM Institute of Science and Technology, Tamilnadu during 22nd to 28th May 2023

Book Published

- Engineering Mathematics-I (SPPU 2022), Fort Flag Books and Media Pvt. Ltd., ISBN : 978-81-961115-0-2 ,Jan 2023
- Engineering mathematics-II (SPPU 2022), Fort Flag Books and Media Pvt. Ltd. , ISBN : 978-81-961115-1-9 , Jan 2023

PROF. SNEHA SINGH

Paper Published/ Presented:

- Published a Paper entitled " Role Of Various Higher Education Discipline Students In Indian Rural Development Through Unnat Bharat Abhiyan Mission – Theoretical Interdisciplinary Approach, in an International Journal Library Progress International, Vol 44 Issue 3, July2024, eISSN 2320-317X pISSN: 0970-1052, Scopus.
- Published a Paper entitled " Green One-Pot Synthesis Of Disubstituted Coumarine At Room Temperature: A Practical Approach For The Large-Scale Synthesis in an International Journal African Journal of Biomedical Research, Vol 27 Issue 1S, September 2024, 1119-5096, Scopus
- Published a Paper entitled " Reflection EMI Shielding effect on Graphene/Cuo Silicon Rubber Nanocomposites Over Broad Frequency Range of 1 GHz to 20 GHz, in an International Journal, Nanotechnology Perceptions, Vol. 20 No. 4 (2024) 519-532 , July 2024, 1660-6795,Scopus.
- Published a Paper entitled " Sustainable and Efficient Synthesis of 2-Amino-4-Aryl Quinoline-3-Carbonitriles, in an International Journal African Journal of Biomedical Research Vol 27 Issue 1S September 2024 1119-5096 Scopus
- Published a Paper entitled " Decision Tree-Based Hedging: Risk and Return Analysis, in an International Journal, Library Progress International ,Vol.44 No.3, Jul-Dec 2024: P. 8008-8014 , July 2024, eISSN 2320-317X pISSN: 0970-1052, Scopus
- Published a Paper entitled " Assessing the Environmental and Infrastructure Impacts: A Comparative Analysis of Traditional Roadways vs. Electric Vehicle (EV) Roads", in an International Journal, International Research Journal on Advanced Engineering Hub (IRJAEH). Vol. 02, Issue: 03 March 2024 , 450 - 456
- Published a Paper entitled "A Comparative Analysis of Traditional Roadways vs. Electric Vehicle (EV) Roads: Environmental, Infrastructure, And Technological Perspectives, International conference on futuristic Trends in Science, Engineering & management, during 23 to 24 Feb 2024
- Published a Paper entitled " Study on Importance, Procedure, and Scope of UNNAT Bharat Abhiyan –A Scoping Review, An International Journal ISSN 2320 – 6632, Volume-1, Issue-8, Sept 2022, NON-SCOPUS
- “A STUDY OF GUIDELINES OF EIA FOR INFRASTRUCTURE PROJECTS”
having reference no./Paper ID- IJARSE-17MAR13CHE-027D1 in November, 2013.
- Guidelines of EIA for Hydropower Projects “in IJAES Volume 27 Issue 11 bearing ISSN (Print): 0975 – 9034 in November 2014.

List of Conferences, seminars,workshops, guest lectures organized/ attended

- organized a guest Lecture " Launch and Lead: An exciting Session on 'To start up'", by Ms. Vidya Munde-Muller, on 03 Feb 25, 142 attendees
- organized a guest Lecture " Launch and Lead: The start up journey unfolded", by Ms.Ms. Prachi Shevgaonkar, on 20 Feb 25, 120 attendees
- Workshop attended on Hydrological Implications of climate change, organized by

PCCOE, ISTE & IIC on 19 Dec 2023

Webinars, FDPs, STTPs, TEQIP attended

- FDP on " Construction safety", held at online, organized by KBTCOE, NAashik during 28 Jun to 3 Jul 2024,
- STTP on " NEP 2020 orientation & sensitization plan" held at online organized by MM TTP, During 5 Aug to 14 Aug 2024
- STTP on " Smart sensing and Intelligent Systems", held at online, organized by ISTE approved Instru dept CCOEW, during 26 Aug to 30 Aug 2024
- FDP on " "NATIONAL EDUCATION POLICY (NEP)-2020 & ITS IMPLICATIONS IN ENGINEERING EDUCATION, during 9 Oct to 13 Oct 2023
- FDP on " Effective drafting of research paper & IPR" during 18 Dec to 23 Dec 2023
- Designing course outcomes-focused questions, Organized by Inpos ed- Tech during 14 Dec 2022
- Webinar on Self compacting concrete & speciality products, organized by Ultra Tech cement Ltd., 24 Dec 2022
- Webinar on cement manufacturing, Process & QA/QC, organized by Ultra Tech cement Ltd., 14 Jan 2023
- One week FDP n Recent advances in the Geo- Environmental Engineering & sustainability, online organized by MIT-WPU, during 26th to 30th september 2022
- One week STTP on Trends & Challenges in Electric vehicles, online, organized by ISTE, during 2nd jan to 6th jan 2023
- International FDP on Soft computing techniques & its application in water resource engineering, online organized by KBTCOE, Nashik, during 5th June to 9th June 2023
- 1 week online FDP n Inculcating universal human values in Technical education, during 29th May to 2nd June 2023

As a resource person

- Invited as External Subject expert for Interview organized by MMCOE, Pune on 6 May 24

Patents published/filed/granted

- System for electric vehicle charging with simultaneous energy generation, Sneha Singh , 2024 , Indian ,202421041895 , Published
- Device to convert waste into energy material, Sneha Singh ,2024 , Indian ,417275-001 ,Granted

PROF. TILOTTAMA BARHATE

List of Conferences, seminars,workshops, guest lectures organized/ attended

- Presented a paper entitled "FUZZY PROGRAMMING APPROACH USING NEW EXPONENTIAL MEMBERSHIP FUNCTION FOR CHANCE CONSTRAINED MULTIOBJECTIVE SOLID TRANSPORTATION PROBLEM" in an International conference Emerging Frontiers of Mathematics and Computational Sciences 24- 26 Oct 2024 at North Eastern Hill University, Shillong, Meghalaya.
- Attended a workshop on AI and Automation in MS Excel (one day),

organized by Skill Nation, 7 March 2024

- Attended a workshop on What, Why and How of Machine Learning (One Day), organized by Centre of research and Advancements in Future technologies, on 5 April 2024

Webinars, FDPs, STTPs, TEQIP attended

- STTP on " Smart sensing and Intelligent Systems", held at online, organized by ISTE approved Instru dept CCOEW, during 26 Aug to 30 Aug 2024
- 1 STTP on "Role of Mathematics in new Education Policy-2020" , held at COEP Technological University, Pune during 3rd Aug 2023 to 5th Aug 2023.
- FDP on " Coursera 4 week course " Mathematical Biostatistics boot camp1" online, organized by Coursera during 28 August 22-30 Sept 2022
- FDP on " Coursera 4 week course " Advanced linear models for Data Science 1: Least squares" online organized by Coursera during 4 Sept 2022- 9 Oct 2022
- FDP on " Coursera 4 week course " Advanced linear models for Data Science 2: Least squares" online organized by Coursera, during 25 Sept 2022- 10 Oct 2022
- FDP on" Coursera 4 week course " Mathematical Biostatistics boot camp2" online organized by Coursera, during 12 Feb 2023- 28 Feb 2023
- FDP on " One week course on Basics of IPR, online organized by Turnip Innovations, during 23 Nov-29 Nov 2022
- FDP on " 2 days State Level QIP Sponsored by SPPU , Pune on MOOCs : Massive Open Online Courses : Design Development and Usage in Academic Frame Work, online organized by Dr B N College of Architecture for Women, Karve Nagar, Pune, during 16-17 Feb 2023
- FDP on" One week AICTE approved FDP on Implementation of Exam reforms online, organized by Dr. DYPatil college Akurdi, Pune, during 20 Feb -25 Feb 2023
- One week FDP on Linear Algebra and its Applications , online organized by Vellore Institute of Technology, Chennai during 27 Feb -3 March 2023.

As a resource person

- Invited as Guest Speaker , Guest lecture on Application of Mathematics in Day to day Life, Organized by ISHRAE, Pune on 18 Sept 2024
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PROF. PRADNYA NANAWARE

- Published a Paper entitled " Use of Assignment mode for effective assessment of students to achieve course outcomes, International Journal, Graduate Research in Engineering and Technology(GRET), Voi.1, Iss.8 (2022), NON-SCOPUS

Webinars, FDPs, STTPs, TEQIP attended

- One week FDP on Linear Algebra and its Applications , online organized by Vellore Institute of Technology, Chennai, during 27 Feb -3 March 2023.
- One week FDP on Scientific Language online organized by Department of Mathematics, The Assam

Kaziranga University, Assam, during 26th April-2nd May, 2023

DR. SHRUTI NAIR

Webinars, FDPs, STTPs, TEQIP attended

- FDP on Quantum Entanglement, held at online, organized by IIT Guwahati, during Feb 24 to March 24
- FDP on "Get Smart with Money", held at MKSSS's CCOEW, Pune, organized by MKSSS's CCOEW and ACE Astute Solutions LLP and approved by ISTE during 21 Oct to 25 Oct 2024

DR. SHAILESH DOKE

- Published a Paper entitled "Determination of total hardness of water sample by titration using double burette method: an economical approach" Chemistry Teacher International, Oct.2, 2024, doi.org/10.1515/cti-2024-0095

Webinars, FDPs, STTPs, TEQIP attended

- Intellectual Property Awareness Training Program under National Intellectual Property Awareness Mission (NIPAM), 25/06/2024, Online, 1 Day
- NPTEL+Workshop on Roadmap:Empowering the Pedagogical Practice, 27/07/2024, Online, 1 Day
- Workshop on Making strides in suitable laboratories: Examples of recent initiative conducted by Royal Society of Chemistry,16/09/2024, Online, 1 Day
- Workshop on ChemisTwin:Cloud-based analysis of NMR and IR Spectra by Royal Society of Chemistry, 08/11/2024, Online, 1 Day

PROF. SEEMA SHAH

Webinars, FDPs, STTPs, TEQIP attended

- IEEE Student Branch sponsored FDP on Entrepreneurship Essentials Offline-Cummins College during 2nd Jan to 6th Jan 2023

PROF. JYOTI CHITALE

Paper Published/ Presented:

- Published paper "Human Resource Management in Library of MKSSS' Cummins College of Engineering for Women: A Case Study" at National Conference on 'Beyond Librarianship : Creativity,Innovation and Diversity' organized by BOSLA and CDAC, Mumbai during 1-17 September 2011.
- Published paper entitled "Innovative practices in Academic Libraries"at National Seminar on 'Empowering Academic Libraries in Knowledge Society' during 21-22 December 2011 organised by University of Mumbai.
- A paper entitled "Exploring the possible best practices with special reference to Academic Libraries" Published at NAAC sponsored National Seminar on 'Best Practices and Student Involvement in Quality Enhancement' during 5-6 October 2012 organised by Shri Shivaji College, Parbhani.
- Published paper on "Soft Skills and Personality Development for 21stCentury Librarian" at UGC sponsored National Conference organized by Degloor College on 'Redesigning Libraries and Information Centers in Digital Era' during 26-27

December 2012.

- Published poster on “Essential skills for LIS professionals” at National Convention on Knowledge, Library and Information Networking 2013, organized by DELNET and Malaviya National Institute of Technology at Jaipur during 10-12 December 2013.
- Published paper entitled “Changing role of Academic Libraries” at National Conference on ‘Changing Trends in Academic Libraries and Librarianship in Digital Environment’ organized by Shivaji University Library Kolhapur during 25-26 February 2014.
- Paper “Promotion and Marketing of Library Services : A case study of MKSSS’ Cummins College of Engineering for Women, Pune” Published at TEQIP II Sponsored National Conference on ‘Reaching the Unreached: Connecting the Library Users and Resources through Innovative Services and Technologies’ during 8-9 August 2014 at Coimbatore.
- BCUD, SPPU sponsored State Level QIP on “Soft Skills: A Key to Professional Excellence” during 8-9 December 2014.
- Published paper entitled “Use of Information Technology in Libraries” at ‘International Conference on Challenges and Opportunities in Library and Information Science and Academic Libraries’ on 10th December 2016 at Mangaon.
- Published poster “Enhancing Readership Of Books From Library To Build Better Society” at International Federation of Library Associations and Institutions (IFLA) 84th World Library and Information Congress (WLIC) in Kuala Lumpur, Malaysia during 26th to 30th August 2018.

PROF. ANJUSHREE AUGUSTINE

Paper Published/ Presented:

- Paper Published at National Seminar on Research Proposal, Publication & Impact Factor published in Indian Streams Research Journal; Topic – Know Plagiarism – If You Want the Credit for Your Own Work; ISSN 2230-7850; held at SSPM College of Education, Barshi, Feb 2013.
- Introduction to Sampling in Paper Published at National Seminar on Research Proposal, Publication & Impact Factor published in Indian Streams Research Journal; Topic – And Research; ISSN 2230-7850; held at SSPM College of Education, Barshi Feb 2013.
- Paper Published at National Congress on “Physical Activity, Fitness and health”; Topic - “Pregnant Women and Physical Activity- Is it safe for pregnant women to do physical activity”; ISBN 978-93-80697-79-6 held at University of Pune in year 2011.
- Paper Published at National Level Seminar on “Physical Education and Fitness for all”, Topic: “Management of Overweight and Obesity”, held at Shri Shahu Mandir Mahavidyalaya, Pune in year 2009.
- Paper Published at International Conference on “Stress Management”, Topic: “Woman under stress: an overview- How to Thrive not just survive” held at L.N.I.P.E Gwalior in 2008.
- Published paper entitled “Focus on what you can control to Improve your sports performance” at ‘National Conference on Psychological contributions in sustainable human development in Sports, Organisations & Community health ’ on 20 - 21 December 2019 at Arts, Commerce & Science college, Kannad.

