

Dr. Shahaji Parmeshwar Kharat (NET, SET) Ph.D.

Present position

- Assistant Professor, Department of Physics, Fergusson College (Autonomous), Pune-411004

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https://scholar.google.co.in/citations?user=4_OMWCgAAAAJ&hl=en



<https://www.researchgate.net/profile/Shahaji-Kharat>

Work Experience

- Since Teaching: 15 June 2017 (7 years)

Personal Profile

Dr. Shahaji Parmeshwar Kharat completed a Ph.D. in Magnetoelectric Materials in February 2023 from the Department of Physics, Savitribai Phule Pune University, Pune. With seven years of teaching experience, actively engaged in teaching B.Sc. and M.Sc. Physics courses. Academic interests include magnetoelectric materials, magnetic materials, and piezoelectric materials. Committed to quality education, fostering scientific curiosity among students, and contributing to research and academic development.

Course(s) Taught (Only Titles)

Theory Courses:

- **PHY1102:** Heat and Thermodynamics
- **PHY1201:** Introduction to Mathematical Physics
- **PHY151:** Thermal Physics
- **PHY162:** Physics in Daily Life
- **PHY2402:** Measurement Techniques in Physics
- **PHY251:** Electricity and Magnetism
- **PHY3502:** Solid State Physics
- **PHY501:** Classical Mechanics
- **PHY5304:** Materials Synthesis, Processing, and Applications
- **PHY551:** Quantum Mechanics
- **PHY601:** Electrodynamics

Laboratory Courses:

- **PHY100:** Physics Laboratory-I (Major) (NEP Pattern)
- **PHY112:** Physics Laboratory-I (Minor) (NEP Pattern)

- **PHY150:** Physics Laboratory-I (Major) (NEP Pattern)
- **PHY162:** Physics Laboratory-I (Minor) (NEP Pattern)
- **PHY1011:** Physics Practical-I (Major and Minor) (NEP 2.0)
- **PHY200:** Physics Practical-III (Major) (NEP-2020 Pattern)
- **PHY212:** Physics Practical-III (Minor) (NEP-2020 Pattern)
- **PHY250:** Physics Practical-IV (Major) (NEP-2020 Pattern)
- **PHY262:** Physics Practical-IV (Minor) (NEP-2020 Pattern)
- **PHY1103:** Physics Practical Laboratory-I
- **PHY1203:** Physics Practical Laboratory-II
- **PHY2303:** Physics Practical Laboratory-III
- **PHY3506:** Physics Practical Laboratory-I
- **PHY3507:** Physics Practical Laboratory-II
- **PHY3508:** Physics Practical Laboratory-III
- **PHY3606:** Physics Practical Laboratory-IV
- **PHY3607:** Physics Practical Laboratory-V
- **PHY3608:** Physics Practical Laboratory-VI
- **PHY5306:** Physics Practical Lab (Special Lab)

Project and Training:

- **PHY245:** Community Engagement Program
- **PHY295:** Field Project
- **PHY5407:** Physics Project (M.Sc. II)
- **PHY560:** On-Job Training

Field of Specialization/Areas of Interests

- Magnetism, Ferroelectric materials, Magnetoelectric materials

Education

- **Ph.D. – (Physics):** from 2014 to 2023
Title of the Thesis: Studies on Magnetoelectric Composite Materials for Sensing Applications
Name of University / Institution: Savitribai Phule Pune University, Pune-411007
Year of Award: 2 February 2023
- **Master of Science- Physics:**2013
 Savitribai Phule Pune University, Pune-411007
- **Bachelor of Science- Physics:**2011
 Annasaheb Magar College, Savitribai Phule Pune University, Pune-411028

Fellowship/Awards/ Certifications/Achievements/Recognitions

1. Received best oral presentation 3rd prize at Raman Memorial Conference -2022
2. Recipient of V. Subramanian Award 2013 in recognition of overall performance in post-graduation.

3. Recipient of a prestigious Malhotra Weikfield Foundation undergraduate and graduate-level fellowship by Hon'ble Dr. R. A. Mashelkar, CSIR, India.
4. Received a JRF position on a project entitled, "Development of novel multiferroic composite materials for sensing applications."
5. Received a basic scientific research (BSR) fellowship.

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
- Departmental OBE co-ordinator for Physics - Member of Student development board	Member of Indian Association of Physics Teachers, IAPT	Coordinator, Prevention of Drug Abuse Program
F.Y.B.Sc. Physics practical Incharge		Coordinator, Red Ribbon Club
NSS Program Officer since 3rd August 2024		

Employment History

- 1) **Organization : Deccan Education Society's Fergusson College (Autonomous), Pune-411004**
Role : Assistant Professor
Duration : Since 15th June 2017

Responsibilities	NSS: NSS Program Officer since 3rd August 2024 Departmental Roles: - Departmental OBE Coordinator for Physics - F.Y.B.Sc. Physics Practical In-Charge - S.Y.B.Sc. Physics Practical In-Charge Committee Memberships: - Member, Indian Association of Physics Teachers (IAPT) - Member, Student Development Board Coordination Roles: - Coordinator, Red Ribbon Club - Coordinator, Prevention of Drug Abuse Program - Coordinator, Election Literacy Club
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Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration (Year) (From To)	Type (Minor/Major)	Outcome
Development of Lead-free Piezoelectric Materials for Stress Sensor Applications	Deccan Education Society's Fergusson College (Autonomous), Pune-411004	1,00,000/-	1 October 2023 to 31 March 2024	Minor	-

Research Publications in National and International Journals

- Published a research paper entitled, "Chemical-Composition Tuning-Enabled Optimization of Structure, Properties, and Performance of Lead-Free $(1-x)$ $\text{BaZr}_{0.05}\text{Ti}_{0.95}\text{O}_3$ – (x) $\text{Ba}_{0.92}\text{Ca}_{0.08}\text{TiO}_3$ Electroceramics, Swati K Gaikwad, **Shahaji P Kharat**, Bharat G Baraskar, Paul G Nalam, Ajit R James, Yesh D Kolekar, CV Ramana, 2024/1/30, The American Chemical Society Journal of Physical Chemistry C.
- Published a research paper entitled, "Effect of Dy^{3+} and Tb^{3+} Rare-Earth Cation Co-Substitution on the Structure, Magnetic, and Magnetostrictive Properties of Ni-Co-Ferrites." Swati K Gaikwad, **Shahaji P Kharat**, Keerthi Haritha, Yesh D Kolekar, CV Ramana, 2023/7/14, American Chemical Society, Inorganic Chemistry, 62, 30, 11837-11848
- Published a book chapter in a book entitled, "Aspects of gauge field theory" by Tarun Laxminarayan Palla, Saurabh Pant, Swati K. Gaikwad, **Shahaji P. Kharat** in the book, Recent Trends in Science and Technology- Mathematics and Stat (MS), with ISBN Number: 978-81-948061-9-6 with page number 7.12 to 7.35.
- Published a research paper entitled, "Enhanced Magnetoelectric Effect in Lead-Free Piezoelectric $\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ - $0.5 \text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ and Fe-Rich Magnetostrictive $\text{Co}_{0.8}\text{Fe}_{2.2-x}\text{Dy}_x\text{O}_4$ Nanocomposites for Energy Harvesting Applications", **Shahaji P. Kharat**, Swati K. Gaikwad, Bharat G. Baraskar, Debabrata Das, R. C. Kambale, Y. D. Kolekar, and C. V. Ramana in the Journal of Materials Science & Engineering B., May 2023 <https://doi.org/10.1016/j.mseb.2023.116363>
- Published a research paper entitled, "Correlation between Cation Distribution, Magnetic and Dielectric Properties of Dy^{3+} -Substituted Fe-Rich Cobalt Ferrite", **Shahaji P. Kharat**, Swati K. Gaikwad, Rahul C. Kambale, Yesh D. Kolekar, and C. V. Ramana, in Inorganic Chemistry on September 1, 2022, 61, 48, 19319-19332, <https://doi.org/10.1021/acs.inorgchem.2c03125>
- Published a research paper entitled, "Effect of Crystal Structure and Phase on the Dielectric, Ferroelectric, and Piezoelectric Properties of Ca^{2+} - and Zr^{4+} -Substituted Barium Titanate", **Shahaji P Kharat**, Swati K Gaikwad, Paul Gaurav Nalam, Rahul C Kambale, Ajit R James, Yesh D Kolekar

- and CV Ramana in Cryst. Growth Des. 2022, 22, 9, 5571–5581, <https://doi.org/10.1021/acs.cgd.2c00679>
7. Published a research paper entitled, “Enhanced magnetostrictive properties of nanocrystalline Dy³⁺ substituted Fe-rich Co_{0.8}Fe_{2.2}O₄ for sensor applications”, **Shahaji P. Kharat**, R. Swadipta, Rahul C. Kambale, Yesh D. Kolekar, C.V. Ramana in Journal of Applied Physics 122 (16), 164101,(2017).
 8. Published a paper entitled, “Studies on structural and magnetic properties of Gd³⁺ substituted CoFe₂O₄ nanoparticles with emphasis on Mössbauer spectroscopy, **S. P. Kharat**, S. G. Kakade, R. C. Kambale and Y. D. Kolekar, AIP Conf. Proc. 1665, 130058 (2015); doi 10.1063/1.4918206, Conference date: 16–20 December 2014
 9. Published a paper in conference proceedings, “Magnetic properties of CoFe₂O₄ and ZnFe₂O₄ nanoparticles synthesized by novel chemical route Conference Paper · May 2016, DOI: 10.1063/1.4948162, **S. P. Kharat**, T. C. Darvade, S. K. Gaikwad, B. G Baraskar, S. G. Kakade, R. C. Kambale and Y. D. Kolekar,* DAE conference date 21–25 December 2015
 10. Published a paper entitled, “Ferroelectric and Piezoelectric Properties of (Ba_{0.7}Ca_{0.3})(Ti_{1-x}Sn_x)O₃ Lead-Free Ceramics”, Bharat G. Baraskar, **S. P. Kharat**, S. G. Kakade, Satoshi Wada, R. C. Kambale and Y. D. Kolekar, in proceeding of the 2015 2nd International Symposium on Physics and Technology of Sensors, 8-10 March 2015 DOI: 10.1109/ISPTS.2015.7220071
 11. Published a paper in conference proceedings, “Effect of Zr⁴⁺ substitution on ferroelectric and dielectric properties of BaTiO₃ ceramics”, Conference Paper · May 2016, DOI:10.1063/1.4948227 , S. K. Gaikwad, V. G. Ghodekar, O. A. Ramdasi, **S. P. Kharat**, S. G. Kakade, R. C. Kambale and Y. D. Kolekar, AIP Conf. Proc. 1731, 140061 (2016); 10.1063/1.4948227, Conference date: 21–25 December 2015.
 12. Published a research paper entitled, “High-Performance, Lead-Free Magnetoelectric Composites Based on Nickel-Cobalt Ferrite and Calcium/Zirconium-Substituted Barium Titanate”, Abhijeet V. Dhotre, **Shahaji P. Kharat**, Tejas K. Jadhav, Jayashri R. Birajdar, Paul Gaurav Nalam, Ajit R. James, Yesh D. Kolekar, C.V. Ramana, *ACS Applied Engineering Materials*, 2024. [DOI: 10.1021/acsaenm.4c00672](https://doi.org/10.1021/acsaenm.4c00672).

Participation in Conferences/Seminars/Symposia/Workshop:

1. Attended and presented a poster paper titled “**Structural and magnetic properties of molybdenum doped yttrium iron garnet**”- **S. P. Kharat**, S. G. Kakade, S. Khanra, P. K. Kahol, K. C. Ghosh

- and Y. D. Kolekar; presented in the **Raman Memorial Conference-2013**, held during Feb. 22-23, 2013 at Department of Physics, University of Pune, Ganeshkhind, Pune – 411007.
2. Attended and presented a poster paper titled “Structural and magnetic properties of pure and rare earth doped yttrium ortho-ferrite”, **S. P. Kharat**, R. K. Gupta, P. Kahol, K. C. Ghosh and Y. D. Kolekar; presented in the **National Conference on Functional Nanomaterials: Synthesis, Characterization and Applications**, held during January 31 to February 02, 2013 at Department of Physics, University of Pune, Ganeshkhind, Pune – 411007.
 3. Attended and presented a poster paper titled “Zero magnetic field regions” in Avishkar 2011, **S. P. Kharat**, R. P. Kharat, B. S. Bendre, held at Annasaheb Magar College, Hadapsar, Pune - 411 028.
 4. Attended a International Photovoltaic Solar Energy Conference (SOLAR ASIA - 2015) held during 30th July 2015 to 1st August 2015 at Department of Physics, S. P. Pune University, Pune-411007.
 5. Presented a paper titled “Magnetic properties and cation distribution of Gd³⁺ substituted CoFe₂O₄ magnetic nanoparticles”, **S. P. Kharat**, B. G. Baraskar, B. C. Keswani, S. G. Kakade, R. C. Kambale, Y. D. Kolekar, in IC-MAGMA 2014 held at Department of Physics, Pondicherry University, Pondicherry, during September 15-17, 2014.
 6. Presented a paper entitled, “Mossbauer spectral studies of Er³⁺ doped cobalt ferrite prepared by sol gel auto combustion method “, S. G. Kakade, R. N. Chikhale, **S. P. Kharat**, Y. D. Kolekar, in IUMRS-ICA 2013 on held at IISc. Bangalore.
 7. Presented a poster in Raman memorial conference on, “Cation distribution and magnetic properties of Gd substituted cobalt ferrite”, **Shahaji P. Kharat**, Sandip G. Kakade, Y.D. Kolekar* Ferrite Material Division, Department of Physics, University of Pune-411007
 8. Presented a poster titled, “ Distribution And Magnetic Properties of Gd³⁺ Substituted CoFe₂O₄ Magnetic Nanoparticles” , **S. P. Kharat**, B. G. Baraskar, S. G. Kakade, R. C. Kambale, Y. D. Kolekar paper has been accepted in DAE SSPS 2014 and proceedings of the symposium will be published by American Institute of Physics, VIT, Vellore.
 9. Presented a Poster in Raman Memorial Conference - 2015 on “Ferroelectric and Dielectric Properties of BT based Lead Free Ceramics” O. A. Ramdasi, B. G. Baraskar, **S. P. Kharat**, S. G. Kakade, R. C. Kambale, Y. D. Kolekar at Department of Physics, University of Pune, held on 13-14, February 2015.
 10. Presented a Poster in international conference on Functional Materials @Nanoscale: Concerns & Challenges 2015 (ICFMNCC-2015) on “Modified Dielectric and Ferroelectric Properties of Sn⁴⁺ Substituted Barium Titanate based Ceramics” O. A. Ramdasi, B. G. Baraskar, **S. P. Kharat**, S. G. Kakade, R. C. Kambale, Y. D. Kolekar at K. B. P. College, Pandharpur, held on 9-11, March 2015.

11. Presented a paper in oral presentation entitled, “Structural, Dielectric and Ferroelectric Properties of Sn^{4+} Modified $\text{BaTiO}_3\text{-CaTiO}_3$ Lead – Free Solid Solution”, B. G. Baraskar, **S. P. Kharat**, S. G. Kakade, R. C. Kambale and Y. D. Kolekar in Raman Memorial Conference (2015).
12. Presented a paper in oral presentation entitled, “Ferroelectric and Piezoelectric Properties of $(\text{Ba}_{0.7}\text{Ca}_{0.3})(\text{Ti}_{1-x}\text{Sn}_x)\text{O}_3$ Lead-Free Ceramics”, Bharat G. Baraskar, **S. P. Kharat**¹, S. G. Kakade¹, Satoshi Wada, R. C. Kambale and Y. D. Kolekar, in 2nd International Symposium on Physics and Technology of Sensors.
13. Presented a Poster in International Conference on Functional Eco-friendly Smart Emerging Materials (FESEM-2016) on “Ferroelectric and Piezoelectric Properties of Hf Modified BaTiO_3 ”; **O. A. Ramdasi**, S. K. Gaikwad, B. G. Baraskar, **S. P. Kharat**, S. G. Kakade, R. C. Kambale, Y. D. Kolekar held at YASHADA, organized by Baburaoji Gholap College, Sangavi, Pune- 411 027, during 10th - 12th March 2016.
14. Presented a Poster in 22nd Raman Memorial Conference - 2016 (RMC-2016) on “Ferroelectric and Dielectric Properties of BT based Lead Free Ceramics”; **O.A.Ramdasi**, S.K.Gaikwad, B.G.Baraskar, **S.P.Kharat**, S. G. Kakade, R. C. Kambale, Y. D. Kolekar held at Department of Physics, University of Pune, Pune- 411 007, during 12th -13th February 2016.
15. Presented a poster in Raman memorial conference on, “Cation distribution of $\text{Co}_{0.8}\text{Fe}_{2.2-x}\text{Dy}_x\text{O}_4$ using Mössbauer Spectroscopy” **S. P. Kharat**, S. G. Kakade, R. C. Kambale, and Y. D. Kolekar Ferrite Material Division, Department of Physics, University of Pune-411007, held on 13- 14 February, 2015
16. Presented a paper ICTAM-AMF-10 on, “Investigation of Solubility Limit of Ca^{2+} Modified $\text{Ba}_{1-x}\text{Ca}_x\text{TiO}_3$ Lead Free Ceramics”, **S. P. Kharat**, S. K. Gaikwad, O. A. Ramdasi, B. G. Baraskar, R. C. Kambale, and Y. D. Kolekar held at University of Delhi, during 7-11, November 2016.

A. Oral presentation in conferences/seminars:

1. Presented a paper in RMC -2022 and received third prize in oral presentation which was conducted on 17th and 18th February 2022.
2. Presented a paper in oral presentation entitled, “Structural and Ferroelectric Properties of $\text{Ba}_{0.92}\text{Ca}_{0.08}\text{TiO}_3$ Lead-Free Ceramics “, **S. P. Kharat**, S. K. Gaikwad, B. G. Baraskar, T. C. Darwade, P. S. Kadhane, R. C. Kambale and Y. D. Kolekar in Raman Memorial Conference (2017) held on 3-4 March 2017.
3. Dielectric and Ferroelectric Properties of Sn^{4+} Modified $\text{BaTiO}_3\text{-CaTiO}_3$ Lead – Free Solid Solution”, B. G. Baraskar, **S. P. Kharat**, S. G. Kakade, R. C. Kambale and Y. D. Kolekar in Raman Memorial Conference (2015) held on 13-14 February 2015.
4. Presented a paper in oral presentation entitled, “Structural, Dielectric and Ferroelectric Properties of Sn^{4+} Modified $\text{BaTiO}_3\text{-CaTiO}_3$ Lead – Free Solid Solution”, B. G. Baraskar, **S. P. Kharat**, S. G.

Kakade, R. C. Kambale and Y. D. Kolekar in Raman Memorial Conference (2015) held on 13-14 February 2015.

5. Presented a paper in oral presentation entitled, “Ferroelectric and Piezoelectric Properties of $(\text{Ba}_{0.7}\text{Ca}_{0.3})(\text{Ti}_{1-x}\text{Sn}_x)\text{O}_3$ Lead-Free Ceramics”, Bharat G. Baraskar, **S. P. Kharat**¹, S. G. Kakade¹, Satoshi Wada, R. C. Kambale and Y. D. Kolekar, in 2nd International Symposium on Physics and Technology of Sensors held on 8-10th March, 2015, Pune, India
6. Presented a oral presentation on, “Modified chemical synthesis route for magnetic properties of CoFe_2O_4 and ZnFe_2O_4 nanoparticles”, **S. P. Kharat**, T. C. Darwade, S. K. Gaikwad, B. G. Baraskar, O. A Ramdasi, S. G. Kakade, R. C. Kambale, Y. D. Kolekar in RMC-2016 held on 12-13 February 2016.
7. Presented a Oral Presentation in State Level Seminar on “Recent Trends In Material Science And Applied Physics” on “Ferroelectric and Dielectric Properties of BT Based Lead Free Ceramics”; O.A.Ramdasi, S.K.Gaikwad, B.G.Baraskar, **S.P.Kharat**, S.G.Kakade, R. C. Kambale and Y. D. Kolekar held at Hutatma Rajguru Mahavidyalaya, Rajgurunagar - 410505, on 5th January 2016.
8. Attended the 18th National Seminar on Frontiers in Physics, held on 10th and 11th February 2025, organized by the Astro Club, Department of Physics, Fergusson College, under the IUCAA Center for Astronomy Research and Development. The seminar featured discussions on recent advancements in physics, with a special focus on astronomy and astrophysics, providing insights from leading researchers and experts in the field.

B. Workshops:

1. Attended a Faculty Development Programme entitled, “Leadership Development through Outdoor-Based Experiential Activities Training Program for Heads of NSS and NCC ” organized by MSFDA, Pune, in collaboration with High Places Management Pvt. Ltd., Pune, from 27th February 2025 to 1st March 2025 at Garudmachi, Pune.
2. Attended a national workshop on, “Towards the self-reliance in advanced ceramics for strategic sectors” organized by jointly Indian Space Research Organization (ISRO) and Vikram Sarabhai Space Center (VSSC) held on 14-15 July 2016 at Thiruvananthapuram, Keral.
3. Attended four days training program conducted by Deccan Education Society in association with Kulkarni laboratory and quality management services on “Laboratory management and internal audit” as per ISO/IEC 17025:2017 conducted from 17th to 20th December 2019.
4. Attended a series of workshops for faculties and the research students to promote interdisciplinary research culture dated 25 March 2023, 31 March 2023, 1 April 2023 and 4 April 2023 conducted at AV hall, Fergusson College (Autonomous), Pune.

5. All state-level members attended a national seminar on “Implementation of multi and transdisciplinary education under NEP 2020” under UGC STRIDE component-I from 18th to 20th January 2023 at Amphitheater, Fergusson College (Autonomous), Pune.
6. Attended a workshop at Modern College from 22nd and 23rd December 2017 on Skills and open ended experimentation in optics.
7. Participated in Frontiers in Physics XIII from 17th and 18th Feb 2020 at Fergusson College (Autonomous), Pune.
8. Participated in Frontiers in Physics XII from 1st and 2nd Feb 2019 and Also celebrated golden jubilee of PG in Physics at Fergusson College (Autonomous), Pune.

C. Resource person

1. Worked as a resource person at Yeshwantrao Chavan College, Satara for state level workshop for NET/SET examination on 15 March 2017.
2. Worked as a resource person for three days workshop for NET/SET preparation at Dayanand College of Arts and Science, Solapur on 30th December 2019.
3. Worked as a resource person at Shri Swami Vivekanand Shikshan Sanstha, Kolhapur’s Smt. Meenalben Mehta College, Panchgani (Arts, Commerce and Science) Tal- Mahabaleshwar, Dist: Satara- 412805 on 28 February 2021 from 11.30 am to 12.30 pm regarding “science day celebration”. This was on the zoom platform.
9. Worked as a resource person at S.P. College Pune for NET and SET workshop on 3rd March 2020.
10. Given a guest lecture on the topic entitled, “Studies of BT-based lead-free materials” at New Arts, Commerce, and Science College, Ahmednagar on 3 December 2022.

D. BOS member:

1. Played an active role as a member of the Board of Studies in framing the syllabus for the Department of Physics at Fergusson College (Autonomous), Pune, for both B.Sc. and M.Sc. Physics programs. This involved aligning the curriculum with the principles of autonomy and the guidelines set forth by the National Education Policy (NEP). It was a rewarding experience to contribute to the development of the educational framework for the department under these evolving educational paradigms

E. Induction program

1. Completed an Induction program also called as an Orientation programme at IISER Pune from 12th November 2018 to 8 December 2018 in Physics by A grade.

F. Short term program or FDP

1. Completed an online short term program also called as Faculty Development Programme (FDP) on Nonomaterials Characterization Techniques and Result Analysis Methodology: Ideas

Innovations and initiatives (Physical Science Five Days (30 contact hours) duration was conducted at the Shikshan Prasarak Sanstha's Sangamner Nagarpalika Arts, D. J. Malpani Commerce, and B. N. Sharda Science College, Sangamner from 27/07/2020 to 34/07/2020 Under the scheme of Pandit Madan Mohan Malaviya National Mission on teachers and teaching

G. Refresher Course

1. Completed an online refresher course from Teaching Learning Centre, Ramanujan College University of Delhi in collaboration with K.L.E. Societys S.K. Arts College and H.S.K. Science Institute, Vidyanagar Hubballi, Karnataka under the aegis of Ministry Of Education Pandit Madan Mohan Malaviya National Mission On Teachers And Teaching Two - Week Refresher Course In "Physics" from 10- 24 April, 2022 and obtained A+ grade.
2. Completed an online refresher course from Teaching Learning Centre, Ramanujan College University of Delhi inter-Disciplinary Two-Week Refresher Course On “Managing Online Classes & Co- creating MOOCS 14.0” from 07 - 21 May, 2022 and obtained Grade A⁺
3. Completed an online refresher course from Teaching Learning Centre, Ramanujan College University of Delhi inter-Disciplinary Two-Week Refresher Course On “Advanced research methodology” from 17 – 31st December 2023 and obtained Grade A⁺.

Events Organized/Coordinated:

Sr. No	Name of the Event	Organizing Institute/College/University	Nature of Contribution	Date
1.	Raman Memorial Conference (RMC-2014)	Department of Physics, Savitribai Phule Pune University, Pune-411007	Organizing Committee member	February 2014
2.	Azadi ka Amrut Mohotsav - 2022	Fergusson College (Autonomous), Pune-411004	Departmental coordinator for Physics	9 to 15 August 2022
3.	Dnyansarita Granth Dindi – A literary procession from Tilak Road to Fergusson College to promote the importance of books and knowledge among students and the community.	Fergusson College, Pune	Organizer	14 th December 2024
4.	HIV and AIDS Awareness Programme – Spreading awareness about prevention, treatment, and social impact of HIV/AIDS.	Fergusson College, Pune under the sponsorship of Red Ribbon Club, National AIDS Control Organization, District Hospital, Aundh, Pune	Organizer	12 th December 2024
5.	Special Winter Camp .	NSS unit, Fergusson College, Pune	Organizer	20 th January to 26 th

				January 2025
6.	Blood Donation Camp – Promoting volunteerism and social responsibility among students.	NSS Unit, Fergusson College, Pune	Organizer & Participant	25 th September 2024