

Dr. Sudhir Pandurang Dange

Associate Professor & Head

Department of Physics,

Dada Ramchand Bakhru,

Sindhu Mahavidyalaya, Panchpaoli,

Nagpur (M.S.)- 440017 (India)

E mail : [**dange.sudhir30@gmail.com**](mailto:dange.sudhir30@gmail.com)

Mob. No.: 9579222976

Date of Birth: 17th Mar 1978



Professional Experience:

- **Associate Professor:** Department of Physics, Dada Ramchand Bakhru, Sindhu Mahavidyalaya, Nagpur- 440017, M.S., India **(1st July 2021 to till date).**
 - ☐ Job responsibility: Teaching B.Sc. (Physics)
 - ☐ Subject taught : Statistical Mechanics, Solid State Physics, Digital & Communication Electronics.
 - ☐ Research area : Ultrasonic characterization of Various biofluids, Biopolymer. DFT (Density Functional theory) study on Drugs.
- **Assistant Professor:**
 - Dada Ramchand Bakhru, Sindhu Mahavidyalaya, Nagpur 440017, M.S., India **(17th Sep 2010 to 30th June 2021).**
 - Arts, Commerce & Science College, Koradi, Dist- Nagpur M.S. India **(1st July 2007 to 16th Sep 2010).**
- **Lecturer:** Arts, Commerce & Science College, Koradi, Dist- Nagpur M.S. India **(1st July 2005 to 30th June 2007).**
- **Ph.D. Student:** Department of Physics, RTM Nagpur University, Nagpur M.S., India (2008-2013)
(Topic – Nonlinear Ultrasonic Propagation Studies in Biofluids)

Academic Qualification-

- **Ph.D. (Physics):** RTM, Nagpur University, Nagpur, M.S., India (2013).
- **UGC State Eligibility Test (SET),** 2007.
- **M.Sc (Physics):** RTM, Nagpur University, Nagpur, M.S., India (1995).
- **M.A. (Public Admin.):** RTM, Nagpur University, Nagpur, M.S., India (2005).
- **B.Ed,** RTM, Nagpur University, Nagpur, M.S., India (2002).
- **B.Sc. (PSM),** RTM, Nagpur University, Nagpur, M.S., India (2000).

Teaching Experience

- ✓ **19 Years [Undergraduate Science College]**
- ✓ **01 Years [Undergraduate Engineering College]**
- Associate Professor in Department of Physics, Dada Ramchand Bakhru Sindhu Mahavidyalaya, Nagpur from 1st July 2021 to till date.

- Assistant Professor in Department of Physics, Dada Ramchand Bakhru Sindhu Mahavidyalaya, Nagpur from 17th Sep 2010 to 30th June.2021.
- Assistant Professor in Department of Physics, Arts,Commerce & Science College, Koradi from 1st July 2007 to 16th Sep 2010.
- Lecturer (Full time Contract Basic) in Department of Physics, Arts,Commerce & Science College, Koradi from 1st July 2005 to 30th June.2007.
- Lecturer (Contributory) in Department of Applied Physics, Laxminarayan Institute of Technology(LIT), R.T.M. Nagpur University Nagpur in 2004-2005.

Administrative Experience

- ✓ Chief Supervisor in RTM Nagpur University, Winter-2016 Examination from 19th Oct 2016 to 24th Dec 2016.
- ✓ Co-ordinator, Department of Computer Science, Dada Ramchand Bakhru, Sindhu Mahavidyalaya, Nagpur, from 30th April to 2nd Oct. 2022.
- ✓ Head, Department of Physics, Dada Ramchand Bakhru, Sindhu Mahavidyalaya, Nagpur, from 1st Oct 2022 onwards.

Research Experience-

- ✓ **11 Years [Excluding Ph. D. Research Work]**
- Ph. D. Guide of RTM Nagpur University Nagpur in Physics from 2014 Onwards.
- Completed UGC Sponsored Minor Research Project: 02
- Registered Ph.D. students: 03
- Research Papers published in National/ International Journals: 19
- Research Paper publications in National/ International Conference Proceedings: 08
- Publication of Research Article in International Edited book: 01
- Presentation of Paper in international & National Conferences: 14
- Participation in International / National conference, Seminar, Workshop:37

Completed Research Project: 02

- UGC sponsored Minor Research Project 47/664/08(WRO): Nonlinear Thermoacoustic Investigation in Biofluids (2009-10 & 2010-11). (Rs 1.15 lakh).
- UGC sponsored Minor Research Project 47/709/13 (WRO): Acoustic and thermodynamic studies of fat soluble vitamins at different environment (2014-15 & 2015-16). (Rs 1.25 lakh).

Ph.D. Students under Guidance: 03

Sr. No.	Name of the Student	Topic of Research	Letter No.	Registration No. & Date of Registration
1.	Aniruddha Babarao Ajmire	Molecular interactions of antihypertensive drug Using ultrasonic, spectroscopic and DFT Study	RTMNU/PH.D CELL/RRC/2022/R1/1051 Date- 24-05-2022	PHDRG202100934102 Date- 17.03.2022
2.	Surendra Adinath Wani	Thermoacoustic and Spectroscopic investigation of Some biopolymers	RTMNU/PH.D CELL/RRC/2022/R1/1035 Date- 24-05-2022	PHDRG202102307102 Date- 17.03.2022

3.	Dhiraj Dayaram Bodele	Ultrasonic Characterization of Imidazolium based Ionic liquids for biomedical applications.	RTMNU/PH.D CELL/RRC/2023/R1/1048 Date- 15-05-2024	PHDRG202303533334 Date- 16.10.2023
----	-----------------------	---	---	---------------------------------------

Publications in Journal-

A] International Journal

1. R. S. Shriwas, O. P. Chimankar, P. V. Tabhane, **S. P. Dange**, Y. D. Tembhurkar, "Effect of temperature on thermoacoustic properties of Olive Oil in alcohol mixture", IOP Conference Series: Materials Science & Engineering 42,2012,1-4,012049. doi:10.1088/1757-899X/42/1/012049.
2. **S. P. Dange**, O. P. Chimankar, S. T. Hiwarkar and S. K. Bodele, "Nonlinear Thermoacoustic investigation in binary mixture of thiamin hydrochloride with NaOH at 303K", Journals of Chemical & Pharmaceutical Research, 5(2),2013,74-77 (ISSN No.- 0975-7384)
3. **S. P. Dange**, O. P. Chimankar, "Thermo acoustic Properties of Aqueous B complex Vitamin Pyridoxine Hydrochloride (B6)", Indian Journal of applied research (Impact factor-0.8215), 3(7), 2013, 576-577 (ISSN No.- 2249-555X).
4. **S. P. Dange**, O. P. Chimankar, "Acoustic Properties of Ternary Liquid Mixture Using Ultrasonic Interferometer Technique", Global research journals (Impact factor-0.2714), 2(7), 2013, 167-168 (ISSN No. - 2277 – 8160).
5. **S. P. Dange**, O. P. Chimankar, A. B. Ajmire and S. T. Hiwarkar "Ultrasonic Study of Molecular Interactions in Biofluids", International J. of Researches in Biosciences, Agriculture & Technology, 2014,397-400 (ISBN No.-2347-517X).
6. **S P Dange**, O P Chimankar, S. T Hiwarkar, "Study the Interaction of Ascorbic Acid with NaOH using Ultrasonic Technique" International Journal of Science and Research (IJSR), Jan-2015, 286-289, ISSN (Online): 2319-7064, (**Impact Factor 4.438**).
7. S T Hiwarkar, **S P Dange**, O P Chimankar, Ranjeeta S Shriwas and P.D.Borkar, "Study of Molecular Interactions of aqueous cellobiose" International Journal of Science and Research (IJSR), Jan-2015, 335-336, ISSN (Online): 2319-7064, (**Impact Factor 4.438**).
8. S. T Hiwarkar, **S P Dange**, O P Chimankar, S A Ghosh, V A Tabhane, "Ultrasonic Velocity and Absorption in aqueous lactose Solution" International Journal of Science and Research (IJSR), Jan-2015, 337-339, ISSN (Online): 2319-7064 (**Impact Factor 4.438**).
9. S.K.Bodele, N.H. Shahare, **S.P. Dange**, "Preliminary phytochemical screening of *ficus mollis* vahl. – leaves" Bionano Frontier, 2017, 10 (3), 234-236 (ISSN No.-0974-0678).
10. S.K.Bodele, N.H. Shahare, **S.P. Dange**, "Physicochemical and Phytochemical Investigation on the Root of *Ceriscoides turgida* (Roxb.) Tirveng" Journals of Chemical & Pharmaceutical Research,2017 9(4), 69-73(ISSN No.- 0975-7384).
11. **S.P.Dange** and O.P.Chimankar, "Molecular interaction study in binary mixture of riboflavin with methanol at 298 K", JETIR, 2020, 7(2),555-557 (ISSN-2349-5162).
12. **S.P.Dange** and O.P.Chimankar" Acoustical Studies of Molecular Interactions in Riboflavin and NaOH at 288 K", Int. Res. J. of Science &Engineering, 2020, Special Issue A7:874-877, ISSN:2322-0015.
13. **S.P.Dange**, P.D. Borkar and O.P.Chimankar "Physico-chemical analysis on binary liquid mixture of Nicotinic acid at different temperatures" , Indian Journal of Pure & Applied Physics, February 2021, Vol. 59,132-137.[**IF-0.923**]

14. **S.P.Dange**, “Nonlinear ultrasonic Propagation study of binary liquid mixture at 308K”, JETIR, 2021, 8(5),f11-f13 (ISSN-2349-5162).
15. **S.P.Dange** and O.P.Chimankar, Ultrasonic analysis of ternary liquid mixture of Riboflavin with water and methanol at 288 K, 2021, IOP Journal of Physics-Conference Series 1913-012006 [Online ISSN-17426596] doi:10.1088/1742-6596/1913/1/012006.
16. **S.P.Dange** and O.P.Chimankar, “Study of Acoustic Behaviour of Thiamin Hydrochloride with Methanol at 303K”, Jordan J. Physics, 2022, 15(1), 43-48.

B] National Journal

1. **S.P. Dange**, O.P.Chimankar, “Thermoacoustic analysis in binary mixture of Pyridoxine hydrochloride with water at 303K”, Physical Chemistry, an Indian journal, 8(4), 2013, 136-139. (ISSN No.-0974 – 7524).
2. **S.P. Dange**, O. P. Chimankar, S. K. Bodele , “Molecular interaction studies in binary mixture of ascorbic acid with methanol using ultrasonic technique ultrasonic ”, Journal of Pure and applied Ultrasonics, 35(2-3), 2013, 101-104 (ISSN No.- 0256-4637).
3. **S.P.Dange**, O.P.Chimankar, S.T.Hiwarkar, “Study of molecular properties of binary mixture using ultrasonic technique”, J. of Science information, 9, 2014, 72-74. (ISSN: 2229-5836).

Publications in Conference Proceedings-

A] International conference Proceedings:

S.P.Dange, O.P.Chimankar, S.T.Hiwarkar, P. Shamkuwar, “Thermoacoustic Analysis in Binary mixture of thiamin Hydrochloride with methanol at different environment” International Conference Proceedings Organized by Acoustical Society of India & French Acoustical Society at NPL New Delhi on “Technology for a Quieter India”, 2013, 666-670.

B] National conference Proceedings:

1. **S. P. Dange**, O. P. Chimankar, S.T.Hiwarkar, “Thermo acoustic investigations in the binary mixture of Riboflavin with water at 288°K”, Proceedings of UGC sponsored National seminar on “Material Preparation & Characterization: Nanoparticle and Future Trend” Organized by Department of Physics, Sindhu Mahavidyalaya, Nagpur ,2013, 49-51. (ISBN No.-978-93-82351-20-7)
2. **S.P.Dange**, O.P.Chimankar, “Ultrasonic analysis of intermolecular interaction in the binary mixture of Nicotinic acid with water”, Proceedings of UGC sponsored National conference on “Synthesis & Applications of Novel Materials” Organized by Dept. of Physics VMV College, Nagpur, 2013, 232-233 (ISBN No.-2229-4554).
3. **S.P.Dange**, O.P.Chimankar, “Ultrasonic wave propagations studies of Nicotinic acid with NaOH at 293K” , Proceedings of National Symposium on Recent Advances in Ultrasonic organized by Dept. of Physics Ravenshaw University Cuttack (Odissa) and Ultrasonic society of india, 2014.
4. **S.P.Dange**, O.P.Chimankar, “Complex formation studies in aqueous vitamins using ultrasonic technique” Proceedings of UGC sponsored National conference on “Advanced Materials” Organized by Dept. of Physics Nabira Mahavidyalaya, Katol, 2014, 269-271 (ISBN No.-978-93-81432-70-9).
5. S.T.Hiwarkar, O.P.Chimankar, **S.P.Dange** “Hydrophilic interaction studies in aqueous D-Mannitol at 303.15K”, Proceedings of UGC sponsored National conference on “Advanced

Materials” Organized by Dept. of Physics Nabira Mahavidyalaya, Katol, 2014, 266-268 (ISBN No.-978-93-81432-70-9).

6. **S.P.Dange** and O.P.Chimankar, “Ultrasonic analysis of thermodynamic parameter of aqueous Riboflavin at 293K” ; DST & DRDO sponsored national conference on “Novel synthesis of advance materials and their applications” at Dept. of Physics, Arts, commerce and science College, Maregaon , Dist-Yavatmal,2015, 315-317.(ISBN No.- 987-81-930894-1-5).
7. S.T.Hiwarkar, **S.P.Dange** and O.P.Chimankar, “Ultrasonic studies on molecular interaction in lactose with NaOH at 308 K for different concentration” ; DST & DRDO sponsored national conference on “Novel synthesis of advance materials and their applications” at Dept. of Physics, Arts, commerce and science College, Maregaon , Dist-Yavatmal,2015, 326-329.(ISBN No.- 987-81-930894-1-5)

Article/ Chapter in edited book [International Publication]:

- Ultrasonic Exploration on Molecular interaction of Aqueous B-Complex Vitamin, Current Advances in Chemistry and Biochemistry,2021 [Vol-6] [B.P. International], eBook ISBN: 978-93-91215-03-3.

Editor/Member of edited book:

- Member of Editorial board in Proceedings book published on UGC sponsored National seminar on “Material Preparation & Characterization: Nanoparticle and Future Trend” conducted by Dept. of Physics, Sindhu mahavidyalaya, Nagpur on 24th Feb. 2013.
- Member of editorial board in RAF-Understanding & Challenges, IQAC, Dada Ramchand Bakhru, Sindhu Mahavidyalaya Nagpur ISBN No- 978-93-5627-478-5.

Book Publications

- “Text book of Physics, “Sound waves, Applied Acoustics, Ultrasonic & Power Supply” for B, Sc.(Sem.III) Paper.- I by Rajni Prakashan , Nagpur (ISBN No.-978- 93-83619-25-2)
- “Text book of Physics, Physical Optics & Electromagnetic waves” for B,Sc(Sem -III) Paper - II by Rajni Prakashan , Nagpur (ISBN No.-978-93-83619-69-6).
- “Text book of Physics, “Sound waves, Applied acoustic, Ultrasonic and Power supply” for for B.Sc. (Sem -III) Paper - I by Central techno Publication,Nagpur (ISBN No.978-81-932578-5-2).
- Text book of Physics, B.Sc. (Sem -IV) by Sai Jyoti Publication, Nagpur. (ISBN No. 978-93-91201-51-7).

Presentation of Paper in Conference-

1. International Level -

Sr. No.	Title of Paper presented	Title of Conference / Seminar	Organized by	Date
1.	Thermoacoustic analysis in Binary mixture of Pyridoxine Hydrochloride with NaOH at different temperature	Ultrasonic and materials Technology for Advanced Technology Theme: Ultrasonic in materials Science	Department of Physics, Prof. Rajendra Singh Institute of Physical Sciences for Study and Research, Veer ahadur Singh Purvanchal University, Jaunpur (UP)	16-18 Nov, 2019

2.	Acoustical study on molecular interaction in binary liquid mixtures at different temperature	Advances in Physical, Chemical and Mathematical Sciences	Rashtrasant Tukdoji Maharaj, Nagpur University, Nagpur	13-16 Feb. 2020
3.	Acoustic wave propagation study of binary mixture of thiamin hydrochloride with methanol using ultrasonic technique	Science, Engineering and Technology	Society for Technologically Advanced Materials of India (STAMI) in association with Dr. Ambedkar college, Nagpur, Shivaji sci college, Amravati	15-16 May 2020.
4.	Thermoacoustic investigation of aqueous Pyridoxine Hydrochloride with methanol at 293K	Innovation in Science, Technology, Humanities, Management and e-commerce for Sustainable rural Development	Anand Niketan College of Science, Arts and Commerce, Warora Dist- Chandrapur	14-15 March 2022
5.	Investigation of acoustical properties of Thiamin Hydrochloride with NaOH at 293K	New Horizons and Trends in Chemical Sciences [ICNHTCS-2022]	Department of Chemistry, DRB Sindhu Mahavidyalaya, Nagpur	25-26 March 2022
6.	Ultrasonic exploration in ternary liquid mixture of Pyridoxine hydrochloride with water and methanol at different temperature	Functional Materials [Innovation in Chemical, Physical and Biological Sciences] [ICFM-2024]	Nabira Mahavidyalaya, Katol in association with Association of Chemistry Teachers, Mumbai	15 & 16 March 2024
7.	Thermodynamic Properties of aqueous Pyridoxine Hydrochloride with NaOH at different temperature using Ultrasonic technique.	Advanced Sustainable Futuristic Material [ASFM-2024]	Kamla Nehru Mahavidyalaya, Nagpur.	26-27 April 2024

2. National Level -

Sr. No.	Title of Paper presented	Title of Conference / Seminar	Organized by	Date
1.	Acoustical investigation in Binary liquid mixture of Nicotinic acid with methanol at 293K	Frontiers in Advanced Acoustical Science and Technology	School of Physical sciences, Ravenshaw University, Cuttack (Odisha) and Acoustical Society of India	17-19 Oct. 2019
2.	Thermodynamic interactions study of Lactose in aqueous medium at 293K (Conference Proceedings)	Frontiers in Advanced Acoustical Science and Technology	School of Physical sciences, Ravenshaw University, Cuttack (Odisha) and Acoustical Society of India	17-19 Oct. 2019
3.	Study of Acoustic Behaviour of Thiamin Hydrochloride with Methanol at 303K	Solid State Chemistry & allied area Theme: Functional materials & Life sciences	Department of Chemistry, S.K. Porwal College, Kamptee	20-21 Dec 2019
4.	Intermolecular interaction study of ternary liquid mixture using ultrasonic method	Innovative & Sustainable Development Practices	Department of Commerce & IQAC, VMV College, Nagpur	17 Feb 2023
5.	Thermodynamics Properties of Pyridoxine Hydrochloride with Methanol at 303 ^o K using Ultrasonic technique	50 th NSA-2023 Emerging Trends in Acoustical Science, Design and technology,	Department of Physics, Veer Surendra Sai University of Technology, Burla, Odisha	24-26 Feb 2023

6.	Ultrasonic Exploration in ternary liquid mixture of Thiamin Hydrochloride with Water and Methanol at different temperature	50 th NSA-2023 Emerging Trends in Acoustical Science, Design and technology,	Department of Physics, Veer Surendra Sai University of Technology, Burla, Odisha	24-26 Feb 2023
7.	Thermoacoustical analysis of ternary liquid mixtures using ultrasonic technique	Advances in Physical and Chemical Research, [NCAPCR-2023]	Department of Physics and Department of Chemical Technology, Sant Gadge Baba, Amravati University, Amravati	10-11 March 2023

Participation in International/National conference, Seminar, Workshop, Symposium:

1. UGC Sponsored National Seminar on “Growth & Characteristics of Solid Materials” Organized by Dept. of Physics, LIT, RTM Nagpur University, Nagpur on 20- 21 Nov 2004.
2. DST Sponsored National Conference on “Nanotrends-2008” Organized by Dept. of Physics, Dharmapeth M.P.Deo Science College, Nagpur on 27th Sep. 2008
3. UGC Sponsored National conference on “The role of yoga in modern life” Organized by Department of Physical Education, Arts, Commerce & Science College, Koradi, Dist.-Nagpur on 3rd Oct 2008.
4. UGC Sponsored National conference on “Environmental Pollution & its impact on ecosystem” Organized by Department of Botany, Arts, Commerce & Science College, Koradi, Dist.-Nagpur on 4th Oct 2008.
5. UGC Sponsored National conference on “Synthesis & Characterization of new materials & its Applications” Organized by Department of Physics, Kamala Nehru Mahavidyalaya Nagpur on 15th March 2009.
6. UGC Sponsored National Conference on “Recent trends in material synthesis & characterization” Organized by Department of Physics, Bhalerao Science College, Saoner ,Dist-Nagpur on 4th & 5th Dec 2009.
7. UGC Sponsored National Conference on “Novel Material & it’s applications” Organized jointly by Department of Physics, N.S.Sci & Arts College Bhadravati & Luminescence Society of India (Maharashtra Chapter) & Dept. of Physics RTM Nagpur University, Nagpur on 18th Dec. 2010
8. UGC Sponsored National Conference on “Nanoscience & Nanotechnology” Organized by Department of Physics, Department of Physics, M.G.Arts ,Sci & Late N.P. Commerce College , Armori Dist-Gadchiroli, on 06th Jan. 2010.
9. UGC Sponsored National Seminar on “Material Preparation & Characterization” Organized by Department of Physics, RTM Nagpur University, Nagpur on 29th March 2011.
10. UGC Sponsored National Conference on “Synthesis & Characterization in Advanced Materials” Organized by Department of Physics, Janta college Chandrapur, on 08th Oct. 2011.
11. Workshop on “Discussion on syllabus in B.Sc. Physics” Organized by Board of studies of RTM Nagpur University, Nagpur at Dr.Ambedkar college,Nagpur on 09th Oct. 2011.
12. UGC Sponsored National conference on “Materials: Atom to Molecules” Organized by Department of Chemistry, Shivaji Science College, Nagpur on 16th Dec 2011
13. UGC Sponsored National Conference on “Recent Trend in Material Synthesis & Characterization” Organized by Department of Physics, Bhalerao Science College, Saoner ,Dist-Nagpur on 17th Dec 2011
14. UGC Sponsored National Conference on “Technologies in Engineering & Science for energy applications” Organized by Department of Physics, Dr.Ambedkar College Deekshabhoomi, Nagpur on 02nd & 3rd Jan 2012.

15. VUPTA Students Seminar in Physics Organized by Dept.of Physics J.B. Science College, Wardha on 7th and 8th Jan 2012.
16. Workshop on “Virtual Instrumentation and programming in Labview” Organized by Department of Physics, RTM Nagpur University, Nagpur on 23rd & 24th Feb.2012.
17. XIX National Symposium on “Ultrasonics in engineering applications” Organized by Ultrasonics Society of India jointly with CSIR –NPL held at NPL, New Delhi on 30-31 Oct.-2012.
18. UGC Sponsored National Seminar on “Material Preparation & Characterization: Nanoparticle and Future Trend” Organized by Department of Physics, Sindhu Mahavidyalaya, Nagpur on 24th Feb 2013.
19. UGC Sponsored National conference on “Nanomaterials: new Horizon for betterment of mankind” Organized by Department of Physics & Chemistry, Shivaji Science College, Nagpur on 28th Feb 2013.
20. University level one-day Workshop on “Discussion of New syllabus in B.Sc. Physics” Organized by Department of Physics, Dr. Ambedkar College, Nagpur in association with Board of Studies in Physics, RTM Nagpur University, Nagpur on 1st July. 2013.
21. CSIR Sponsored National conference on “Current Development in Nanoscience: Challenges and Opportunities” Organized by Department of Physics, Kamala Nehru Mahavidyalaya Nagpur on 14th Sep. 2013.
22. UGC Sponsored National conference on “Synthesis & Applications of Novel Materials” Organized by Department of Physics, VMV College, Nagpur on 5th Oct.2013.
23. International conference on “Technologies for a Quieter India” Acoustics 2013” on 10-15 Nov 2013 organized by Acoustical society of India(ASI),French Acoustical society(SFA) and CSIR-National Physical Laboratory, New Delhi.
24. UGC sponsored National conference on “Material Characterization and their applications” on 6th Feb 2014 organized by Department of Physics, Anand Niketan College, Anandvan Warora, Dist- Chandrapur.
25. UGC sponsored National conference on “Advanced Materials” Organized by Dept. of Physics Nabira Mahavidyalaya, Katol in association with Luminessence Society of India, on 1st March 2014.
26. International conference on “Ultrasound in Biomedical and industrial applications” Organized by Dept. of Physics, RTM Nagpur University, Nagpur in association with Ultrasonic Society of India, New Delhi on 22-24th Jan. 2015.
27. UGC sponsored National conference on “Life Sciences Revolution: PCR and its applications” Organized by Dept. of Microbiology, DRB Sindhu Mahavidyalaya, Nagpur, on 20th Dec 2014.
28. DST & DRDO sponsored National conference on “Novel synthesis of advanced materials and their applications” Organized by Dept. of Physics Arts, comm. & Science college, Maregaon (Dist Yavatmal) in association with Luminessence Society of India, on 6th Feb. 2015.
29. Intercollegiate workshop on “Eletroacoustics-2017” on 1st & 2nd Aug 2017 organized by Dr. Ambedkar College, Nagpur.
30. National conference on “Modern science & Religious beliefs response of contemporary religions to recent developments in science” on 22nd Jan 2018 organized by SFS College, Nagpur.
31. One-day workshop on “Intellectual Property Rights” on 25th April 2018 at DRB Sindhu Mahavidyalaya, Nagpur

32. 47th National conference on “Frontiers in Advanced Acoustical Science and Technology” organized by School of Physical sciences, Ravenshaw University, Cuttack (Odisha) and Acoustical Society of India on 17-19 Oct. 2019.
33. International Conference on Ultrasonics and Materials Science for Advanced Technology, (ICUMSAT- 2019) November 16-18, 2019, Department of Physics Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research VBS Purvanchal University, Jaunpur-222003, U.P., India.
34. National conference on “Solid State Chemistry & allied area Theme: Functional materials & Life sciences” organized by Department of Chemistry, S.K. Porwal College, Kamptee on 20-21 Dec 2019.
35. International Conference on Advances in Physical, Chemical and Mathematical Sciences ICAPCM 2020, RTM Nagpur University, Nagpur, 13-16 February 2020.
36. Online International webinar on “Science, Engineering and Technology” organized by Society for Technologically Advanced Materials of India (STAMI) in association with Dr. Ambedkar college, Nagpur, Shivaji sci college, Amravati on 15-16 May 2020.
37. 108th Indian Science Congress, held in RTM Nagpur University, Nagpur from Jan 3 to 7, 2023.

Membership of National Level Association

1. Life membership in Indian Physics Association (2011 onwards).
2. Life membership in Indian Association of Physics Teacher (2011 onwards).
3. Life membership in Ultrasonic society of India (2012 onwards).
4. Life membership in Dr. Ambedkar teacher’s welfare association (2012 onwards).
5. Life membership in Acoustical society of India (2013 onwards).

Orientation/ Refresher/ Faculty Development / Training program attended:

1. Attended UGC sponsored Orientation course organized by academic staff college, Rashtrasant Tukdoji Maharaj Nagpur University Nagpur from 24.2.10 to 23.03.10
2. Attended UGC sponsored Refresher course in information technology organized by academic staff college, Rashtrasant Tukdoji Maharaj Nagpur University Nagpur from 04.3.11 to 24.03.11 at Department of Physics Rashtrasant Tukdoji Maharaj Nagpur University Nagpur.
3. Attended UGC sponsored short term course on “Positive Discrimination & Quality in Higher Education “organized by Sindhu Mahavidyalaya, Nagpur from 12.3.12 to 10.04.12.
4. Attended UGC sponsored Refresher course in scientific computation organized by academic staff college, Rashtrasant Tukdoji Maharaj Nagpur University Nagpur from 02.12.15 to 22.12.15 at Department of Electronics, Rashtrasant Tukdoji Maharaj Nagpur University Nagpur.
5. Attended UGC sponsored Short term course on “Mooc’s, E- Content Development and open educational Resources” organized by HRDC, Rashtrasant Tukdoji Maharaj Nagpur University Nagpur from 25.11.2019 to 30.11.2019.
6. Attended MHRD sponsored Faculty Development Program on “Open source tool for Research” organized by Pandit Madan Mohan Malviya National Mission on Teacher’s and Teaching Learning Centre, Ramanujan college (University of Delhi) from 08.06.2020 to 14.06.2020.
7. Attended UGC sponsored Short term course on “Research Methodology for Sciences” organized by HRDC, Doctor Harisingh Gour Vishwavidyalaya, Sagar [MP] from 16.10.2020 to 22.10.2020.

Responsibilities in College

- Exam incharge in RTMNU, B.Sc, [Sem-1 &3] Regular students , Wint-2022 Exam.
- Member of IQAC committee in college (2015-16 & 2016-17).
- Member of Admission committee for B.Sc (PCM/PEM) in college (2015-16, 2016- 17, 2017-18 & 2018-19, 2022-23).
- Worked as a Incharge & Member of Technical Committee of B. Sc [Sem-I] Admission,
- Member of committee organized on occasion of 125th Birth Anniversary of Dr. B.R. Ambedkar.
- Incharge in Essay competition organized on occation of 125th Birth Anniversary of Dr. B.R. Ambedkar.
- Treasurer in UGC sponsored National seminar on “Material Preparation & Characterization: Nanoparticle and Future Trend” conducted by Dept. of Physics, Sindhu Mahavidyalaya, Nagpur on 24th Feb 2013.
- Contribution in organizing various extra-Curricular activities in the college.
- Incharge of NAAC committee of Criteria-4 in the college.
- Judge in Innovative Science working Model Competition on occasion of National Science Day in DRB Sindhu Mahavidyalaya, Nagpur on 27th Feb 2023.

Responsibilities in University

- Valuer and Moderator in various B.Sc. (Annual/Semester) University Physics theory examinations.
- Examiner in various B.Sc.(Annual/Semester) University Physics practical examination.
- Question Paper setter of various B. Sc. Physics examinations of RTM Nagpur University
- Setting Question Paper of M.Sc. (Sem-I) Classical Mechanics of G.H. Rasoni University Saikheda (M.P.)
- Member of Selection committee as a Subject expert for selecting Assistant Professor in Physics in Various colleges under RTM, Nagpur University, Nagpur.
- Task Force committee member, Board of Studies in Physics, RTM Nagpur University Nagpur
- Member of CAS Selection committee of Assistant Professor in Physics as a Subject expert in Various colleges under RTM, Nagpur University, Nagpur.
- Examination Incharge of B.Sc.- Sem-I & III, RTMNU, W-2022 Examination conducted in college level.
- Examination Incharge of B.Sc.- Sem-I & III, RTMNU, W-2022 [Supplementary] Exam conducted in college level.
- Member of LEC Committee of RTM, Nagpur University, Nagpur.

Other Activities Performed:

- Member of interview panel to select Post Graduate Teachers (Physics) & Train Graduate Teachers (Science) in Jawahar Navodaya Vidyalaya Schools & colleges situated in various District of Maharashtra and Gujrat States.
- Performed duty as a Presiding officer in Loksabha election on 10th April 2014.
- Performed duty as a Presiding officer in Maharashtra Vidhansabha election on 15th Oct. 2014.
- Performed duty as a Presiding officer in Loksabha election on 19th April 2024
