Dr. B Lakshmeesha Rao Assistant Professor, Dept. of Physics

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Working at Poornaprajna College Since: 2020

Educational Qualification

- Ph.D. in Physics, Mangalore University (2017)
- M.Sc. in Physics from Mangalore University (2011)

Work experience

- Assistant Professor at Poornaprajna College, Udupi (2020-till date)
- Assistant Professor at SDM (Autonomous) College, Ujire (2017-2020)
- Guest Faculty in Department of Studies and Research in Physics, at Mangalore University (2015-2017)
- Senior Research Fellow in CSIR-EMR-II Research Scheme, at Mangalore University (2013-2015)
- Junior Research Fellow in DAE-BRNS Major Research Project, at Mangalore University (2011-2013)

Awards/Achievements

 Sir C V Raman Prize, Dr. S.N. Bose Prize, Dr. Homi Bhabha N.S.R.P.-7 Prize forTopper in Electronics Specialization in degree of Master of Science in Physics – 2011

Areas of interest (Academic)

Teaching: Condensed Matter Physics, Electronics, Atomic and Molecular Physics, C Programming, μP Programming, Analog and digital communications, Optical Fibre Communication, Nanomaterials and nanostructures

Research: Green synthesis of nanoparticles, Polymer nanocomposites, Irradiation effects on polymers/nanocomposites, Structural/ Optical/ Mechanical/ Thermal/ Morphological analysis of nanostructure/polymer/composites.

Expertise

Preparation, radiation processing and blending of biopolymer films using various techniques; Biosynthesis and radiation assisted synthesis of metal nanoparticles; Structural and Chemical analysis of samples with handling and operating the powder XRD and FT-IR/ATR; Mechanical property of the polymer samples analysis with handling and operating of UTM instrument; Surface morphological analysis of polymer samples with handling and operating of AFM; Thermal analysis of the samples with handling and operation of DSC-TGA instrument; Optical property analysis of samples by operating and handling UV-Vis Spectrophotometry; Statistical analysis of the results. (ANOVA and TUKEY tests). Operating Microsoft applications.

Research Publications

Journal articles

- C. S. Shivananda, B. Lakshmeesha Rao, and Y. Sangappa, Structural, thermal and electrical properties of silk fibroin–silver nanoparticles composite films, Journal of Materials Science: Materials in Electronics, Vol. 31, pp 41–51, 2020. doi: https://doi.org/10.1007/s10854-019-00786-3
- 2. B. Lakshmeesha Rao, Mahadev Gowda, S. Asha, K. Byrappa, B. Narayana, R. Somashekhar, Y. Wang, L. N. Madhu, Y. Sangappa, Rapid synthesis of gold nanoparticles using silk fibroin: characterization, antibacterial activity, and

- anticancer properties, Gold Bulletin, Vol. 50(4), pp 289–297, 2017. doi: https://doi.org/10.1007/s13404-017-0218-8
- 3. R. Madhukumar, S. Asha, B. Lakshmeesha Rao, B. K. Sarojini, K. Byrappa, Youjiang Wang and Y. Sangappa, Optical properties of gamma irradiated Bombyx mori silk fibroin films, Radiation Effects and Defects in Solids, Vol. 170 (11), pp. 906-915, 2015, doi: 10.1080/10420150.2015.1136309
- R. Madhukumar, B. Lakshmeesha Rao, S. Asha, B. Narayana, K. Byrappa, Youjiang Wang, Donggang Yao and Y. Sangappa, Gamma radiation assisted synthesis of silver nanoparticles and their characterization, Advanced Materials Letters, Vol. 6(12), pp. 1088-1093, 2015, doi:10.5185/amlett.2015.6002, ISSN: 0976-3961
- G. Rajesha Shetty, B. Lakshmeesha Rao, S. Asha, Youjiang Wang and Y. Sangappa, Preparation and Characterization of Silk Fibroin/HPMC Blend Films, Fibers and Polymers, Vol. 16(8), pp. 1734-1741, 2015, doi:10.1007/s12221-015-5223-z
- Y. Sangappa, S. Asha, B. Lakshmeesha Rao, Mahadeva Gowda and R. Somashekhar, Influence of electron irradiation on Tassar Non-mulberry silk Fibers, Journal of Fashion Technology & Textile Engineering, Vol 3(1), pp. 1-4, 2015,doi: http://dx.doi.org/10.4172/2329-9568.1000119
- B. Lakshmeesha Rao, Y. Sangappa, Effect of Gamma Irradiation on HPMC/ZnO Nanocomposite Films, Radiation Effects and Defects in Solid, Vol. 170(6), pp. 501-509, 2015, doi:10.1080/10420150.2015.1052432, ISSN: 1042-0150
- 8. B. Lakshmeesha Rao, R. Madhukumar, S. Asha, G. Rajesha Shetty, Prashantha Naik and Y. Sangappa, Mechanical and antibacterial properties of ZnO nanoparticles incorporated HPMC polymer nanocomposite films, Research Journal of Pharmaceutical, Biological and Chemical Sciences, Vol. 6(3), pp. 767-771, 2015, ISSN: 0975-8585

- 9. Y. Sangappa, B. Lakshmeesha Rao, S. Asha, R. Madhukumar and R. Somashekar, Physical, Chemical and Surface Properties of Alkali Treated Indian Hemp Fibers, Composite Interface, Vol. 21(2), pp. 153-159, 2014, doi: 10.1080/15685543.2013.855485
- 10. Y. Sangappa, B. Lakshmeesha Rao, S. Asha, S. Ganesh, R. Somashekhar and Timma Reddy, Effect of High Energy Electrons on Physical and Tensile Properties of Non-Mulberry Silk Fibers, Fibers and Polymers, Vol. 14(6), pp. 1032-1039, 2013, doi: 10.1007/s12221-013-1032-4
- 11. B. Lakshmeesha Rao, Y. Sangappa, S. Asha, Mahadeviah and R. Somashekar, Microstructural and Mechanical Properties of ZnO Nanoparticles Incorporated HPMC Films, International Journal of Science research, Vol. 1(4), pp. 219-223, 2012, e-ISSN: 2320-0820
- 12. B. Lakshmeesha Rao, Mahadevaiah, Y. Sangappa, S. Asha and R. Somashekhar, Microstructural Parameters in Electron Irradiated PVA Films by Wide Angle X-ray Scattering Studies (WAXS), Advanced Materials Research, Vol. 585, pp. 532-536, 2012, doi: 10.4028/www.scientific.net/AMR.585.532

Book Chapters/Conference proceedings

- 1. G. Rajesha Shetty, B. Lakshmeesha Rao, Preparation and characterization of silk fibroin-polyvinyl alcohol (PVA) blend films for food packaging materials, Materials Today: Proceedings, Volume 55, Part 1, 2022, Pages 194-200, doi: https://doi.org/10.1016/j.matpr.2022.02.034
- 2. G. Rajesha Shetty, B. Lakshmeesha Rao, Preparation, characterization of SF- HPMC blend films and SF microparticles, Materials Today: Proceedings, Volume 49, Part 5, 2022, Pages 1822-1826, doi: https://doi.org/10.1016/j.matpr.2021.08.048
- 3. G. Rajesha Shetty, B. Lakshmeesha Rao, Structural, mechanical and thermal properties of gamma irradiated SF_HPMC blend films, Abstracts of International Conferences & Meetings (AICM), Vol 1(3), pp 24, 2021, DOI: https://doi.org/10.5281/zenodo.5051398

- 4. B. Lakshmeesha Rao, G. Parameshwara Gouda and C. S. Shivananda, Green Synthesis of Silver Nanoparticles Using Hibiscus Rosa Sinensis Flower Extract, AIP Conference Proceedings, Vol 2220, pp 020103 (1-4), 2020, https://doi.org/10.1063/5.0002996
- C. S. Shivananda, B. Lakshmeesha Rao, K. Nagi Reddy, and Y. Sangappa, UV

 Radiation induced nucleation and growth of colloidal silver nanoparticles:
 Characterization and their antibacterial properties, AIP Conference Proceedings, Vol 2220, pp 020024 (1-4), 2020, https://doi.org/10.1063/5.0001148
- B. Lakshmeesha Rao, C. S. Shivananda, G. Rajesha Shetty, K.V. Harish, R. Madhukumar and Y. Sangappa Influence of UV Irradiation on Hydroxypropyl Methylcellulose Polymer Films, AIP Conference Proceedings, Vol 1953, pp 080011 (1-4), 2018, doi: http://doi.org/10.1063/1.5032817
- 7. C. S. Shivananda, B. Lakshmeesha Rao B, G. Rajesh Shetty, Y. Sangappa, Structural and Thermal Properties of Silk Fibroin Silver Nanoparticles Composite Films, AIP Conference Proceedings, Vol 1953, pp 030254 (1-4), 2018, doi: http://doi.org/10.1063/1.5032589
- 8. G. Rajesha Shetty, B. Lakshmeesha Rao, Mahadeva Gowda, C. S. Shivananda, S. Asha and Y. Sangappa, The Preparation and Characterization of Silk Fibroin Blended with Low Molecular Weight Hydroxypropyl Methylcellulose (HPMC), AIP Conference Proceedings, Vol 1942, pp 070032 (1-4), 2018, doi: 10.1063/1.5028830
- 9. K. V. Harish, B. Lakshmeesha Rao, S. Asha, C. Vipin, Y. Sangappa, Structural Mechanical and Antibacterial Properties of HPMC/SF-AgNPs Nanocomposite Films, AIP Conference Proceedings, Vol. 1942, pp 050117 (1-4), 2018, doi: 10.1063/1.5028748
- 10. B. Lakshmeesha Rao, R. Madhukumar, K. Sharath Chandra, Neelakandan R, Youjiang Wang and Sangappa Y, Physicochemical and Antimicrobial Properties of Gamma Irradiated HPMC/ZnO BNC Films, Elsevier Materials Today: Proceedings, Vol. 5, Issue 10(1), pp. 21398-21405, 2018, doi:https://doi.org/10.1016/j.matpr.2018.06.546
- 11. C. S. Shivananda, B. Lakshmeesha Rao, A. Pasha, Y. Sangappa, Synthesis of Silver Nanoparticles Using Bombyx mori Silk Fibroin and Their Antibacterial Activity, IOP Conference Series: Materials Science and Engineering, Vol. 149(1), pp. 012175, 2016, doi: 10.1088/1757-899X/149/1/012175

- 12. R. Madhukumar, S. Asha, B. Lakshmeesha Rao, B. Narayana, K. Byrappa, Youjiang Wang and Y. Sangappa, Synthesis and Characterization of Silver Nanoparticles, Proceedings and Abstract Book of International Conference on Materials Science & Technology 2016, pp. 1, 2016, doi:10.5185/icmtech.2016
- 13.B. Lakshmeesha Rao, R. Madhukumar, S. Latha, G. Rajesha Shetty, C. S. Shivananda, K. Sharath Chandra and Y. Sangappa, Influence of Gamma Irradiation on Structural, Thermal and Antibacterial Properties of HPMC/ZnO Nanocomposites, AIP Conference Proceedings, Vol. 1731, pp. 070014 (1-3), 2016, doi: 10.1063/1.4947846
- 14. C. S. Shivananda, B. Lakshmeesha Rao, R. Madhukumar, B. K. Sarojini, R. Somashekhar, S. Asha and Y. Sangappa, Silk Fibroin/Pullulan Blend Films: Preparation and Characterization, AIP Conference Proceedings, Vol. 1731, pp. 070013 (1-3), 2016, doi: 10.1063/1.4947845
- 15. G. Rajesha Shetty, B. Lakshmeesha Rao, Mahadeva Gowda, C. S. Shivananda, S. Asha, K Byrappa and Y. Sangappa, The Gamma Irradiation Effects on Structural and Optical Properties of Silk Fibroin/HPMC Blend Film, AIP Conference Proceedings, Vol. 1731, pp. 070015 (1-3), 2016, doi: 10.1063/1.4947847
- 16. B. Lakshmeesha Rao, C. S. Shivananda, G. Rajesha Shetty, R. Madhukumar, S. Latha, Mahadeva Gowda, K. V. Harish and Y. Sangappa, UV irradiation effects on HPMC-ZnO Nanocomposites, Proceedings of International Conference on Advances in Materials, Manufacturing and Applications, pp. 587-594, 2015, Bonfring Publications, ISBN:978-93-84743-68-0
- 17. B. Lakshmeesha Rao, S. Asha, R. Madhukumar, S. Latha, Mahadeva Gowda, G. Rajesha Shetty, C. S. Shivananda, K. V. Harish and Y. Sangappa, Effect of Gamma Irradiation on HPMC/ZnO Nanocomposite Films, AIP Conference Proceedings, Vol. 1665, pp 070020 (1-3), 2015, doi: 10.1063/1.4917884
- 18. G. Rajesha Shetty, R. Madhukumar, B. Lakshmeesha Rao, S. Asha and Y. Sangappa, Preparation and Characterization of silk fibroin/HPMC blend film, AIP Conference Proceedings, 1665, pp 070023 (1-3), 2015, doi: 10.1063/1.4917887
- 19. R. Madhukumar, S. Asha, B. K. Sarojini, R. Somashekhar, B. Lakshmeesha Rao, C. S. Shivananda, K. V. Harish and Y. Sangappa, Structural and thermal properties of gamma irradiated Bombyx mori silk fibroin films, AIP

- Conference Proceedings, Vol. 1665, pp. 070025 (1-3), 2015, doi: 10.1063/1.4917889
- 20. B. Lakshmeesha Rao, S. Asha, R. Madhukumar, S. Latha, Mahadeva Gowda, G. Rajesha Shetty, K Sharath Chandra, Prashantha Naik, and Sangappa, Structural, Surface Wettability and Antibacterial Properties of HPMC-ZnO nanocomposite, AIP Conference Proceedings, Vol. 1591, pp 807-809,2014, doi: 10.1063/1.4872763
- 21. B. Lakshmeesha Rao, Mahadeviah, S Asha, R Somashekhar and Y. Sangappa, Effect of ZnO Nanoparticles on Structural and Mechanical Properties of HPMC Polymer Films, AIP Conference Proceedings, Vol. 1512, pp. 588-589, 2013, doi: 10.1063/1.4791174
- 22. Y. Sangappa, B. Lakshmeesha Rao, S. Asha and R. Somashekhar, Effect of Alkali Treatment on the Physical and Surface Properties of Indian hemp Fibers, AIP Conference Proceedings, Vol. 1512, pp. 586-587, 2013, doi: 10.1063/1.4791173
- 23. B. Lakshmeesha Rao, Mahadeviah, S. Asha, R. Somashekhar and Y. Sangappa, Effect of ZnO Nanoparticles on Structural, Mechanical, Optical and Surface Properties of HPMC Polymer Films, Application of Nano materials: Electronics, Energy and Environment, pp.101-106, 2012, Bloomsberry Publishing India Pvt ltd., ISBN: 978-93-82563-35-8

Paper presented in conferences/seminars

- Presented a paper entitled "Preparation and Characterization of Silk Fibroin-Polyvinyl Alcohol (PVA) Blend Films for Food Packaging Materials" in 9th National Conference on Condensed Matter Physics and Applications (CMPA 2021), September 16-September 17, 2021, Manipal, Karnataka, India
- Presented a paper entitled "Green synthesis of silver nanoparticles using Hibiscus Rosa Sinensis flower" in International Conference on Condensed Matter & Applied Physics (ICC-2019), October14-October15, 2019, Bikaner, Rajasthan, India.
- Presented a paper entitled "Synthesis and characterization of silver nanoparticles by hibiscus rosa Sinensis flower extract" in 8th National Conference on Condensed Matter Physics and Applications (CMPA 2019), September 27-September 28, 2019, Manipal, Karnataka, India.

- Presented a paper entitled "Synthesis and characterization of chemically sprayed Zn_{0.99}La_{0.01}O thin films" in 8th National Conference on Condensed Matter Physics and Applications (CMPA 2019), September 27-September 28, 2019, Manipal, Karnataka, India.
- Presented a paper entitled "Influence of substrate temperature on the structure and optical properties of chemically sprayed Zn_{0.99}La_{0.01}O thin films" in 7th National Conference on Condensed Matter Physics and Applications (CMPA 2018), September 10-September 11, 2018, Manipal, Karnataka, India.
- Presented a paper entitled "Effect of UV irradiation on LLDPE-ZnO nanocomposite films" in 7th National Conference on Condensed Matter Physics and Applications (CMPA 2018), September 10-September 11, 2018, Manipal, Karnataka, India.
- Presented a paper entitled "Role of ZnO Nanoparticles as UV and Microbial Shielding in Cellulose Food Packaging Materials" in International Conference on Recent Advances in Materials Science and Biophysics (RAMSB 2018), January23-January25, 2018, Mangalore, Karnataka, India.
- Presented a paper entitled "Influence of UV Irradiation on Hydroxypropyl Methylcellulose Polymer Films" in 2nd International Conference on Condensed Matter and Applied Physics (ICC 2017), November24-November25, 2017, Bikaner, Rajasthan, India.
- Presented a paper entitled "Structural and Thermal Properties of Silk Fibroin

 Silver Nanoparticles Composite Films" in 2nd International Conference on
 Condensed Matter and Applied Physics (ICC 2017), November24-November25, 2017, Bikaner, Rajasthan, India.
- Presented a paper entitled "Structural, Mechanical and Antimicrobial properties of gamma irradiated HPMC-ZnO Films" in National Conference on Novel Polymeric Materials (POLYCON 2017), September15-September16, 2017, Mysore, Karnataka, India.
- Presented a paper entitled "A study of surface wettability and antibacterial activity of HPMC/ZnO BNCs for food packaging application" in National Conference on Particle Accelerator in Interdisciplinary Research (PAIR), April11-April13, 2017, Mangalore, Karnataka, India.
- Presented a paper entitled "Green Synthesis of Colloidal Silver Nanoparticles using Silk Fibroin: Their Characterization and Antibacterial Activity" in International Conference on Green Chemistry & Nanotechnology

- Opportunities and Challenges, February27-February28, 2017, Mangalore, Karnataka, India.
- Presented a paper entitled "Physicochemical and Antimicrobial Properties of Gamma Irradiated HPMC/ZnO BNC Films" in International Conference on Smart Engineering Materials (ICSEM-2016), October20-October22, 2016, Bangalore, Karnataka, India.
- Presented a paper entitled "A study of Surface Wettability and Antibacterial Activity of HPMC/ZnO BNCs for Food Packaging Application" in National Seminar & Workshop on Functional Nanomaterials for Energy Environment and Health FUNEH -2016, March21-March22, 2016, Mangalore, Karnataka, India.
- Presented a paper entitled "Influence of Gamma Irradiation on Structural, Thermal and Antibacterial Properties of HPMC/ZnO Nanocomposites" in National Level DAE- Solid State Physics Symposium, December 21-December 25, 2015, Noida, Uttar Pradesh, India.
- Presented a paper entitled "Effect of gamma irradiation on mechanical and antibacterial properties of HPMC/ZnO BNCs" in International conference on Nanoscience, Nanotechnology & Advanced Materials, December14-December17, 2015, Visakhapatnam, Andhra Pradesh, India.
- Presented a paper entitled "UV irradiation effects on HPMC-ZnO Nanocomposites" in International Conference on Advances in Materials, Manufacturing and Applications (AmmA 2015), April09-April11, 2015, Tiruchirappalli, Tamil Nādu, India.
- Presented a paper entitled "Effect of gamma irradiation on HPMC/ZnO nanocomposite films" in National Level DAE- Solid State Physics Symposium, December 16-December 20, 2014, Vellore, Tamil Nādu, India.
- Presented a paper entitled "Gamma Irradiation Effects on HPMC-ZnO Nanocomposites" in International Conference on Advanced Polymeric Materials (ICPPC – 2014),October11-October13, 2014, Kottayam, Kerala, India.
- Presented a paper entitled "Thermal and mechanical properties of gamma irradiated HPMC-ZnO nanocomposite films" in Indo-UK International Workshop on Advanced Materials & their Applications in Nanotechnology (AMAN 2014), May 17-May 19, 2014, Zuarinagar, Goa, India.

- Presented a paper entitled "Effect of ZnO nanoparticles on Physicalmechanical and antibacterial properties of Hydroxypropyl Methyl cellulose films" in 6th National Conference on Advances in PolymericMaterials (Energy, Environment & Health) (NCAPM), POLYCON'2014, April25-April26, 2014, Mysore, Karnataka, India.
- Presented a paper entitled "Structural and mechanical properties of ZnO nanoparticles incorporated gamma irradiated HPMC polymer films" in 2nd National Conference on Condensed Matter Physics and Applications (CMPA 2013), December 27-December 28, 2013, Manipal, Karnataka, India.
- Presented a paper entitled "Structural, Surface Wettability and Antibacterial Properties of HPMC-ZnO Nanocomposite" in National Level DAE- Solid State Physics Symposium, December17-December21, 2013, Patiala, Punjab, India.
- Presented a paper entitled "Structural and Optical properties of ZnO incorporated HPMC composite films" in International Conference on Advanced Polymeric Materials 2013, October11-October13, 2013, Kottayam, Kerala, India.
- Presented a paper entitled "Structural and Optical properties of ZnO incorporated HPMC composite films" in International Conference on Advanced Polymeric Materials 2013, October11-October13, 2013, Kottayam, Kerala, India.
- Presented a paper entitled "Mechanical and antibacterial properties of ZnO incorporated HMPC polymer films" in International Conference on Materials for Advanced Technologies- 2013, June 30-July 05, 2013, Suntec City, Singapore.
- Presented a paper entitled "Characterization of Electrons Irradiated Bombyx mori Silk Fibroin Films" in National Conference on smart materials &technologies for emerging electronics, NC-SMTEE 2013, March08-March09, 2013, Moodabidri, Karnataka, India.
- Presented a paper entitled "Effect of ZnO Nanoparticles on Structural and Mechanical Properties of HPMC Polymer Films" in National Level DAE-Solid State Physics Symposium, December03-December07, 2012, Mumbai, Maharashtra, India.
- Presented a paper entitled "Effect of ZnO Nanoparticles on Structural, Mechanical, Optical and Surface Properties of HPMC Polymer Films" in IUPAC-International Symposium on Macro- and Supramolecular Architectures

- and Materials: Nano systems and Applications, MAM 12, November21-November25, 2012, Coimbatore, Tamil Nadu, India.
- Presented a paper entitled "Microstructural and Mechanical Properties of ZnO Nanoparticles Incorporated HPMC Films" in International Conference on Recent Advances in Materials Science -2012, November06-November08, 2012, Bangalore, Karnataka, India.
- Presented a paper entitled "Microstructural Parameters in Electron Irradiated PVA Films by Wide Angle X-ray Scattering Studies (WAXS)" in International Conference on Advanced Materials Processing: Chaxllenges and Opportunities -2012, November02-November04, 2012, Roorkee, Uttarakhand, India.
- Presented a paper entitled "Electron Irradiation Effects on the Structural and Tensile behaviour of Mulberry and Non-Mulberry Silk Fibers" in International Conference on Natural Polymers 2012, October26-October28, 2012, Kottayam, Kerala, India.

Short-term courses attended

- Attended and Completed "Four week Induction/Orientation program for Faculties in Universities/Colleges/Institution of Higher Education" organized by Teaching Learning Center, Ramanujan College, University of Delhi, under Ministry of Education, Pandit Madan Mohan Malaveeya National Mission on Teachers and Teaching, from 21 March to 19 April, 2022.
- College Level Two Day Teacher Training Programme, organised by IQAC, Poornaprajna College, on 7th to 8th October, 2020.
- Three Days National Level Online Faculty Development Programme, held by S. Nijalingappa College, Bangalore, on 21st to 23rd July, 2020.
- 21 days UGC refresher course on University and PG College MSc Teachers Training Program in Physics, supported and approved by MHRD, Govt. of India under 'Pandit Madan Mohan Malaviya National Mission on Teachers and Training' at Centre for Excellence in Science and Mathematics Education, Indian Institute of Science, Challakere Campus, Chitradurga, Karnataka, on 7th June to 28th June 2018.

Guest Lectures delivered

• Delivered a special lecture on "Basics of Semiconductor devices" at SDM PU College, Ujire on 30th October, 2018.

Seminars/Workshops attended

- Attended an Extension/Science popularization program by C N R Rao Hall of Science, JNCASR, Bangalore, at Poornaprajna Education Centre, Sangameshwarapete, on 8 July, 2022.
- Participated in workshop on Research Methodology Application of Tools and Techniques for Data analysis, organized by IQAC, PPC, on 4 June, 2022.
- Attended NAAC sponsored One Day National Seminar on Emerging Challenges and Changes in Student Centric Learning and Challenges in Sustenance of Best Practices in Higher Education, Organized by RTE Society's Arts, Science and Commerce Degree College, Ranibennur, on 26 May, 2022.
- Attended a Conference on Strategies for betterment of Higher Education and Governance of Universities, Organized by Forum of Former Vice Chancellors of Karnataka State Universities and Mangalore University, at Mangalagangotri, Mangalore University on 30 May, 2022.
- Attended a National Level workshop on "Higher Educational Institutions on Transformation Through NAAC Accreditation Process", at Zoom Platform from 21-06-2021 to 22-06-2021.
- Attended "Two days International e-Conference Applied Materials and Technology 2020", at WebEx Platform from 09-10-2020 to 10-10-2020.
- Attended "National level webinar on "CURIOSITY, IMAGINATION & KNOWLEDGE", at Google Meet Platform on 03-10-2020.
- Attended "National Conference in Physics (NCSP-2017) on topic Nano, Cryo and Space Physics" at St. Aloysius College, Mangalore on 15-12-2017.
- Attended Invited talks on "Role of DST in Promoting S & T Ecosystems: Avenues and Opportunities" and "International Collaborations of DST" at Mangalore University on 06-12-2017.
- Attended "Science Academies' Lecture Workshop on Condensed and Soft Matter Physics" at Mangalore University from 22-02-2017 to 24-02-2017.
- Attended "National seminar on Interdisciplinary Research: Challenges and Opportunities" at Mangalore University on 18-10-2016.

- Attended "National workshop on Blood Irradiation and its Application in Transfusion Medicine" at Mangalore University on 17-10-2015
- Attended "Workshop on Research Training" at Canara College, Mangalore, on 11-10-2015.
- Attended "Orientation Workshop on Radiation Its Applications in Physical, Chemical and Life Sciences" at Mangalore University, from 24-06-2015 to 25-06-2015.
- Attended "One day User Awareness Programme on Shodhganga and Anti-Plagiarism software iThenticate/Turnitin" at Mangalore University on 12-02-2015.
- Attended "Seminar on Radiation and Radioisotopes: Tools for Scientific Research" at Mangalore University, on 28-04-2014.
- Attended "Workshop on AFM/STM" at Bangalore from 31-01-2013 to 01-02-2013.
- Attended "30th IARP MATIONAL CONFERENCE (IARPNC 2012)" at Mangalore University from 15-03-2012 to 17-03-2012.

Seminars/Workshops organized

- Arranged and Participated **FDP on Keizen** for Poornaprajna College and Sri Poornaprajna Evening College staffs, organized by IQAC, on 25 May, 2022.
- Organized State level workshop on "Scope of research in Basic Science Apprentice with Scientists" on December 27- 29, 2021 at Poornaprajna College, Udupi.
- Organised "Vijnana Prajna Malike" One week webinar for rural high school students, teachers and general public, through Google Meet platform, on November 15-19, 2021 at Poornaprajna College, Udupi.
- Organised "Training program on Basics in Microsoft and Google Applications" on February 14-21, 2018 at PG Centre, SDM College, Ujire,
- Organised "Workshop on Basics in Arduino" on October 24-25, 2018 at PG Centre, SDM College, Ujire.
- Organised National Level workshop on "**Physics of Musical Instruments**" on December 16-17, 2016 at St Aloysius College, Mangalore.