BIO-DATA

Name: **Dr. Pravina Prakash Pawar. / Dr. Pravina Sanjay Ugile**

Designation: Professor Dept. Of physics Dr.B.A.M. University Aurangabad.

Qualification: M.Sc, B.Ed., Ph. D. with Nuclear physics as a specialization.

Address (Resi): Maitree Heights, Plot No 18, Flat no 6, Cidco N-7

Near Garware Community Center, Aurangabad.

Email-ID pravina.pawar@yahoo.com

pravinapawar4@gmail.com

Teaching Experience: 21(Accepted Feb.2024) (Accepted Feb.2024) years

Mobile Number: +91- 9422919463

Research field and Research Publications: "Interaction of gamma-ray photon with biological systems"

Currently working on:

1] Nano materials as a nuclear medicine used for cancer treatment, Radiation therapy.

Gamma ray interaction studies of Nanomaterials.

2] CoF_2O_4 nanoparticle-pellets synthesized using cost-effective sol-gel auto- -irradiation

at 2 -irradiation on structure, morphology and mesoporosity.

List of Publications in national and international conferences / seminar/ symposium.

1. A simple method of determining photoelectric cross sections at 279.30 keV. Photon for Cr, Ni, Cu, Ag and Pb. (Proceedings of thirteenth National Symposium on radiation physics. Dec. (1999) Page Number 602-607 (Mangalore)
2. Studies on attenuation coefficient of gamma radiation in 3d metal oxide from 10 keV to 1500keV.IUMRS_ICA 98 Oct. (1998) Bangalore. International Union of materials research societies-International Conference in Asia.
3. Total photon –absorption cross section for VO_2 and V_2O_5 in energy region of 10 keV-1500keV Journal of Science Vol 29 No 6, 95-100-1998-1999.

4. Evaluation of gamma ray attenuation coefficient for magnetic ceramic materials. (Proceedings of DAE-BRNS. National Symposium on Recent trends in Electro and magneto ceramics (feb.18-20(1999) Shivaji University, Kolhapur.
5. Measurements of gamma ray photon attenuation in pure lead for different energy points. (NCMRAT-2007 29-31 Jan 2007 (Aurangabad)
6. Energy Resolution Characteristics of High purity Germanium Detector (International Symposium on Nuclear Physics Vol 43 B (2000) Dec.18-22, 2000.
7. "Studies in thermodynamic properties of electrolytes in aqueous solution of Glycine at different temperatures" (paper is published in Indian Journal of Pure and Applied Physics Feb.2010 vol 48 page no 95-99.
8. "Phase development and Dielectric Properties of $Pb_{1-1.5x}La_xTio_3$(PLT) Ceramics"(paper is accepted for international conference on Material Science and Technology (MS &T'09)to be held during -25-29 oct 2009 Pittsburgh Pennsylvania University USA.
9. "Measurement of linear attenuation coefficients of gamma rays for some elements by HpGe photon detector "paper is accepted for regional level one day seminar on "modern trends in Physics" organized by Dept.of physics Swa.Sawarkar Mahavidyalaya, Beed on 9th February 2010 .
10. "Sol –Gel Synthesis and effect of particle size of lead titanate nanoparticles" " (paper is accepted for National conference on "Advancements in nanoscience for different technologies" organized by Shrikrishna Mahavidyalaya, Gunjoti during 10-11 February 2010.
11. "Radiation attenuation Technique for film thickness measurement" "paper is accepted for National conference on " Recent trends in thin film technology" organized by Dept of Physics Jijamata college of Science and Arts, Bhende Bk. Tal –Newasa,Dist –Ahmednagar, Maharashtra,India. During 23-24, February 2010.
12. "Effect of ion ratio of Cu/In in spray solution and growth temperature on structural properties of spread $CuInS_2$ films." paper is accepted for National conference on " Recent trends in thin film technology" organized by Dept of Physics Jijamata college of Science and Arts, Bhende Bk. Tal –Newasa,Dist –Ahmednagar,Maharashtra ,India. during 23-24, February 2010.
13. "Synthesis and characterization of nano thin films" paper is accepted for International conference on "Lasers and advanced materials organized by Dept of Physics M.E.S.Abasaheb Garware College Karve Road, Pune-411004, Maharashtra, India. During 6-8, March 2010.
14. The "Review of nanostructured materials and their applications in bionanotechnology, biomedical and envirment" paper is accepted for National conference on "Nanostructured materials and their applications "organized by Dept. of Physics Shri. Madhavrao Patil Mahavidyalaya Murum Tq. Omerga, Dist Osmanabad (M S.) 431 605, during 12-13, March 2010.
15. "Synthesis and Characterization of Glassy Borate Oxide Systems" paper is accepted for an International symposium on the "Synthesis and Characterization of Glass/Glass-ceramics (IWSSCGGC-2010)" organized by C MET Pune in association with Materials Research Society of India Pune 411 007 during July 9-10, 2010.
16. "Review of biomaterial technology and its medical applications" (paper is accepted for international conference on Material Science and Technology (MS &T'10) to be held during -17-21 October 2010 Houston, TX, USA.
17. "Effect of weight fraction of different constituent elements on the total attenuation coefficients of some Amino acids in the energy range 10 KeV to 1500 KeV." (Paper is accepted for publication to ISSI'S Journal of physical and chemical sciences in forthcoming issue Nov-2010.
18. "A Review of recent developments in surface cleaning using lasers" paper is accepted for the National Seminar on Recent trends in physics -2010.held on 10th -11th Dec. 2010. at ICLES"s M.J.College, Vashi.Navi Mumbai-400703
19. " Synthesis of Nano-sized Lead Titanate Powder by the Sol-Gel method and Size Effect on Structure" Paper is accepted for the International Conference on nanoscience and nanotechnology Jan 11-13-2011. *Organized by* School of Physical Sciences Swami Ramanand Teerth Marathwada University, Nanded- 431606 (M. S.), India.

20. " Urban air pollution causes and effects: a review –part I" paper is accepted for International Conference on Sustainable Environment "ECO REVOLUTION 19-20th February 2011 Aurangabad, Maharashtra State,
21. "Urban air pollution and the associated health hazards: a review - part II" paper is accepted for International Conference on Sustainable Environment "ECO REVOLUTION 19-20th February 2011 Aurangabad, Maharashtra State, India
22. "Physics Education Research Practices: A Review" Paper is accepted for National Workshop Cum Seminar on "Physics Education Research: Research Based Reforms in Physics Instruction" Organized in collaboration with Indian Association of Physics Teachers (IAPT) at St.Bede's College, Shimla from 22nd -29th May, 2011.
23. "Noise Pollution and its control" Paper is accepted for National Symposium on Acoustics NSA-2011 from 17th -19th November, 2011, Jhansi, Uttar Pradesh Oral presentation.

24. "Ultrasonic velocity and density of Citric acid and tartaric acid at different concentrations and Temperatures in double distilled water *Alka Tadkalkar, * **Pravina Pawar** and **Govind K. Bichile"Paper is accepted for National Symposium on Acoustics NSA-2011 from 17th -19th November, 2011Jhansi, Uttar Pradesh
25. "Measurement of mass and linear attenuation coefficients of gamma-rays of photons with biological Sample "paper has been accepted for the Workshop on Nanotechnology and Intellectual Property Rights And Patents in Science and Technology from Nanotechnology Perspectives 16th -17th February- 2012. Organised by Department of Nanotechnology Dr.B.A.M.University Aurangabad-431004

26. Papers on **"**TOTAL ATTENUATION CROSS SECTIONS OF SEVERALPROTEINS AT 661.6,1173 AND 1332.5 keV", paper is accepted for the INTERNATIONAL CONFERENCE ON GLOBAL TRENDS IN PURE AND APPLIED CHEMICAL SCIENCES 3rd -4th March 2012 Udaipur (Rajasthan) India Poster presentation

27. "Studies of properties of liquid by ultrasonic method" paper is accepted for the INTERNATIONAL CONFERENCE ON GLOBAL TRENDS IN PURE AND APPLIED CHEMICAL SCIENCES 3rd -4th March 2012 Udaipur (Rajasthan) India

28. "Health effects of water and Air Pollution" paper is accepted for the INTERNATIONAL CONFERENCE ON GLOBAL TRENDS IN PURE AND APPLIED CHEMICAL SCIENCES 3rd -4th March 2012 Udaipur (Rajasthan) India.

29. "Total interaction cross sections of L Arginine LR containing C, H, N, & O in the energy range 122-1330 KeV." paper is accepted for the ' Nanocon 012'-IInd INTERNATIONAL CONFERENCE Nanotechnology – Innovative Materials, Processes**,** Products & Application Conference to be held on: 18th -19th October, 2012 at BVU, Pune, India Poster presentation.

30] **"**Good Quality teaching and learning with ICT-A review**"** paper is accepted and worked as Chair Person in the Session III. in Two Day National Seminar on "Quality Enhancement in Higher Education -2012" Date:07th and 8th December 2012 and presented a paper .

31] "Measurement of mass and linear attenuation coefficients of gamma rays of (Au) for 360, 511, 662, 1170, 1280, 1330 KeV photons "paper is accepted in DAE-BRNS 11th Biennial Symposium on Nuclear and Radiochemistry –NUCAR 2013 held at Govt.Model Science College (Autonomous),R.D.University,Jabalpur,during February 19-23,2013 and presented a poster.

32] "Effect of weight fraction of different constituent elements on the mass attenuation coefficients of some proteins in the energy range 10 KeV to 1500 KeV**"** paper is accepted in DAE-BRNS 11th Biennial

Symposium on Nuclear and Radiochemistry-NUCAR 2013 held at Govt. Model Science College (Autonomous), R.D. University, Jabalpur, during February 19-23,2013 and presented a poster.

33] "Traditional teaching methods in physics" Bibifatima M Ladhaf, Shaikh Humera P B and **Pravina P Pawar**.Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

34] "Teaching aids in physics: A Review"Bibifatima M Ladhaf Shaikh Humera P B and **Pravina P Pawar**. Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

35] "Noble methods of teaching physics"Shaikh Humera P B. Bibifatima M Ladhaf and **Pravina P Pawar** Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

36] Novel innovative teaching techniques in physics Prashant Kore Bharat S Surung Bibifatima Ladhaf and **Pravina P Pawar** Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

37] Innovative teaching methods in physics Sandip Pawar, Prashant Kore Bibifatima Ladhaf **Pravina P Pawar** Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

38] Effective teaching techniques for physics Shilpa Mirikar **Pravina P Pawar** and Govind K bichile. Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

39] Teaching methodologies of physics Vandana Tupe and **Pravina P Pawar** Paper accepted in National Conference on Ennovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

40] Creative teaching techniques in physics Prashant Kore Bharat S Surung, Bibifatima Ladhaf and **Pravina P Pawar**. Paper accepted in National Conference on Innovative teaching methods in Physics Organized by Deogiri College Aurangabad on 30-31 August 2013.

41] "Studies of total interaction cross sections of Propionic acid in the energy range 0.122-1.330 MeV."Shaikh Humera P B. Bibifatima M Ladhaf and **Pravina P Pawar**. Paper is accepted in National Conference on Pharmaceutical Analysis organized by Dept.of Chemical Technology Dr.B.A.M.University Aurangabad. On 18-19-October 2013.

42] "Photon mass energy absorption coefficient of L-cystine from 122-to 1330 keV" Prashant Kore and **Pravina P Pawar** Paper is accepted in National Conference on Pharmaceutical Analysis organized by Dept.of Chemical Technology Dr.B.A.M.University Aurangabad. On 18-19-October 2013.

43]"Effective Atomic Number and Electron Density of Propionic Acid in the Energy Range 122-1330 keV."Paper is accepted for National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013) OCTOBER 28-29,2013 Published in Bionano Frontier Vol 6 Issue-4 Oct-2013 ISSN 0974-0678 online p.no. 79-81. **Pravina P Pawar**

44] "Measurement of Linear Attenuation Coefficients of Propionic Acid from 122 to 1330 keV" Paper is accepted for National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013)

OCTOBER 28-29, 2013.Photons. Published in Bionano Frontier Vol 6 Issue-4 Oct-2013 ISSN 0974-0678 online p.no. 82-84. **Pravina P Pawar**

45] "Photon mass energy –Absorption Coefficients of Propionic Acid From 122keVto 1330keV."
Paper is accepted for National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013) OCTOBER 28-29, 2013. Published in Bionano Frontier Vol 6 Issue-4 Oct-2013 ISSN 0974-0678 online p.no. 85-87. **Pravina P Pawar**

46] "Determination of Molar Extinction Coefficients of Propionic Acid Using NaI (Tl) Scintillation Detector." Paper is accepted for National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013) OCTOBER 28-29, 2013. Published in Bionano Frontier Vol 6 Issue-4 Oct-2013 ISSN 0974-0678 online p.no. 159-161. **Pravina P Pawar**

47] "Measurement of mass attenuation coefficients of orbital from 122 to 1330 keV photons' Paper is accepted for National Conference on Materials Science: Trends and Future-2014(NCMS-2014) organized by Dept.of Physics,Bharatiya Mahavidyalaya, Amravati on Jonuary 10-11,2014.Published in International journal of basic and Applied research ISSN Print -2249-3352 Online ISSN-2278-0505. **Pravina P Pawar**

48] "Studies of total attenuation cross sections of L-Cystine in the energy range 0.122-1.330MeV". Paper is accepted for National Conference on Materials Science: Trends and Future-2014(NCMS-2014) organized by Dept.of Physics, Bharatiya Mahavidyalaya, and Amravati on Jonuary 10-11, 2014.Published in International journal of basic and applied research ISSN Print -2249- 3352 Online ISSN-2278-0505. **Pravina P Pawar**

49] "Determination of molar Extinction Coefficient of Sodium metal using NaI (Tl) Scintillation Detector."Paper is accepted for National Conference on Materials Science: Trends and Future-2014(NCMS-2014) organized by Dept.of Physics, Bharatiya Mahavidyalaya, and Amravati on Jonuary 10-11, 2014.Published in International journal of basic and applied research ISSN Print -2249- 3352 Online ISSN-2278-0505. **Pravina P Pawar**

50] "Studies on linear attenuation coefficient and Total Interaction Cross Sections of Sodium metal in the Energy Range 0.122-1.330 MeV" Paper is accepted for DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24,2014 Bhabha Atomic Research Centre Mumbai,India.for poster presentation . **Pravina P Pawar**

51] " Determination of Total Interaction Cross section and Mass Energy –absorption Coefficient of Sorbitol using NaI(Tl) Scintillation Detector" Paper is accepted for DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24,2014 Bhabha Atomic Research Centre Mumbai, India. For poster presentation. **Pravina P Pawar**

52] "Measurements of Mass attenuation coefficients and molar extinction coefficients of L-Cystine using gamma ray spectrometer". Paper is accepted for DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24, 2014 Bhabha Atomic Research Centre Mumbai, India. for poster presentation. **Pravina P Pawar**

53] " Determination of Gamma Ray Mass Attenuation Coefficient Using NaI(Tl) Detector". Paper is accepted for DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24,2014 Bhabha Atomic Research Centre Mumbai,India. for poster presentation . **Pravina P Pawar**

54] "Photon Mass Eneergy –absorption Coefficients of propionic acid from 122 keV to 1330keV". Paper is accepted for DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24,2014 Bhabha Atomic Research Centre Mumbai,India. for poster presentation . **Pravina P Pawar**

55] "Energy dependence of mass attenuation coefficients, effective atomic numbers and effective electron densities of saturated Undecylic fatty acid($C_{11}H_{22}O_2$), in the energy range 10 keV – 1500keV". Paper is accepted for'Nanocon 014'-IIIrd International Conference NANOCON014 Smart Materials,composites,Applications and New at Pune,India on 14,15 October 2014 for poster presentation . **Pravina P Pawar**

56] "Gamma Ray Spectrometric Analysis of Some Composite Materials: A Review" Vandana A. Tupe[1], **Pravina P.Pawar**[2] Satish B Shelke[3] and Pradnya R Maheshmalkar[4] Paper is accepted for'National Conference on Material Science (NCMS-2014) at K.S.K.College Beed,India on 12,13 December, 2014 for oral presentation .

57] Milliya college conference on 23-24 Dec 2014 and presented a paper entitled "Gamma Rays Interaction Studies of Composite Material: A Review "Vandana A. Tupe[1] and **Pravina P.Pawar[2]**

58] Pre Science Congress on "Science and Technology for Human Development" December 30-31, 2014 organised by Dr.B.A.M.University Aurangabad and presented a paper entitled "A Comprehensive Investigation and Formulas for Mass Attenuation Coefficient, Effective Atomic Number and Electron Density for all Types of Materials, in the Energy Range 0.001-100 GeV" D.K.Gaikwad and **Pravina P.Pawar**.

59] Paper entitled "Mass enegy-absorption coefficients and average atomic energy-absorption coefficients for amino acids in the energy range 0.122-1.330 MeV" is accepted for International Conference on Condensed matter and applied physics on 30-31, Oct., 2015 organized by Dept. of Physics, Govt. Engineering college, Bikaner. **Pravina P Pawar**

60] Paper entitled "Measurements of radiological data of some amino acids in the energy range 0.122-1.330MeV" is accepted for International Conference on Condensed matter and applied physics on 30-31, Oct., 2015 organized by Dept. of Physics, Govt. Engineering college, Bikaner. **Pravina P Pawar**

61] Paper entitled"Gamma ray interaction studies on mass attenuation coefficient and molar extinction coefficient of 5-nitrouracil in the energy range 356keV -1330 keV". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

62] Paper entitled"Copmarative study of Effective Atomic Number and Electron Density for Nanomaterial in wide energy range (10^{-3} to 10^5 MeV ". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

63] Paper entitled"Measurement of Mass Attenuation Coefficient of Silver Copper Alloys in the energy range 122 keV to 1330keV". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

64] Paper entitled" Effective Atomic Numbers for Some Low –Z Materials". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

65] Paper entitled"Study on the Gamma Ray Attenuation Cross-Sections,Effective Atomic Numbers of Mesolite and Gryolite". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

66] Paper entitled"Photon mass energy-absorption coefficients for amino acids". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

67] Paper entitled"Measurement of attenuation parameters of Lactic acid and lactate salt in the range 10-1500keV". is accepted for International Conference on functional materials and microwaves-(ICFMM-2015) on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

68] Paper entitled**"** Using gamma ray spectrometry biomedical radiological data of lipids**"**. is accepted for International Conference on functional materials and microwaves-(ICFMM-2015)on 29-31 Dec 2015 organized by Dept. of Physics,Dr.B.A.M.University Aurangabad. **Pravina P Pawar**

69] Paper entitled "Effective atomic number for Cerium Oxide (Ce_2O_3) from 1-10^5 MeV"is accepted for two days "National Conference on material science and renewable energy sources (NCMSRES-16) at Rajarshi Shahu Mahavidyalaya, Latur from 11-12 March 2016. **Pravina P Pawar**

70] Paper entitled "Ultrasonic studies on interaction of inorganic salts with biomolecule" is accepted for two days "National Conference on material science and renewable energy sources (NCMSRES-16) at Rajarshi Shahu Mahavidyalaya, Latur from 11-12 March 2016. **Pravina P Pawar**

71] Paper entitled "Molar absorptivity for l-thioproline in the energy range 0.1-15 MeV"" is accepted for International conference on recent development in engineering, science, management and humanities(ESMH-16) at MB college Latur,India on 13 March ,2016. **Pravina P Pawar**

72] Paper entitled "Effect of Absorber Concentration and Collimator Size on Gamma ray Attenuation Measurements" is accepted for International conference on recent development in engineering, science, management and humanities(ESMH-16) at MB college Latur,India on 13 March ,2016. **Pravina P Pawar**

73] Paper entitled "Photon interaction study of inorganic nonlinear optical materials in the energy range 356 keV to 1330 keV" is accepted for International conference on Radiation Biology (ICRB -2016) with the theme "High LET Radiobiology and Complex Natural Products in Biology and Medicine," during November 09 – 11th, 2016. **Pravina P Pawar**

74] Paper entitled "Study of natural radioactivity in some rock and soil samples" is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University ,Bhubaneswar during February 6-10,2017.organised by Bhaba Atomic Research Centre in association with KIIT University ,Bhubaneswar Abdu Hamoud Al- Khawlan …..**Pravina P Pawar**

75] Paper entitled "Gamma Ray interaction properties of poly (benzyl methacrylate)" is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University ,Bhubaneswar during February 6-10,2017.organised by Bhaba Atomic Research Centre in association with KIIT University ,Bhubaneswar Bhosale R R **Pawar P P**

76] Paper entitled "Energy absorption and Exposure Buildup factor of D-Phenylalanine Amino acid" is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University ,Bhubaneswar during February 6-10,2017.organised by Bhaba Atomic Research Centre in association with KIIT University ,Bhubaneswar R M Lokhande …. **Pravina P Pawar**

77] Paper entitled "Determination of mass attenuation coefficient and effective atomic numbers in ($BaTiO_3$) within the energy range of 0.122- 1.330 MeV. " is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University ,Bhubaneswar during February 6-10,2017.organised by Bhaba Atomic Research Centre in association with KIIT University ,Bhubaneswar Shamsan saleh … **Pravina P Pawar**

78] Paper entitled "The study of radiological parameters of inorganic nonlinear optical materials in the energy range 356keV -1330 keV." is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University ,Bhubaneswar during February 6-10,2017.organised by Bhaba Atomic Research Centre in association with KIIT University ,Bhubaneswar V V Awasarmol … **Pravina P Pawar.**

79] Paper entitled "Gamma Radiation Studies on Organic Nonliner Optical Materials in the Energy Range 122-1330keV" is published in the Proceedings of the National Academy of Sciences,Indian Section A: Physical Sciences https://doi.org/10.1007/s40010-019.00636.1 27 July 2019.

80] Paper entitled " Studies on mass attenuation coefficient , effective atomic number , and electron density of some low Z materials in the energy range 0.122 to 1.330 MeV"' is published in International conference on Multifunctional Materials. Held during 19 -21 December 2019 at Getangali college Engineering and technology Keesara Telangana India.

81] Paper entitled PANI- ZnO cladding modified optical fiber biosensor for uriea sensing application based on evanescent wave absorption. In the third International conference on recent trends in image processing and pattern recognition (PTIP2R, 2020) held during third – 4 th January 2020 at department of computer science and information technology Dr BAMU Aurangabad.

82] Attended International workshop on " Recent trends in Functional materials and research opportunities in Taiwan and other Foreign universities Organised by RUSA center for advanced center technology Dr. BAMU Aurangabad (M.S.) during January 6-7 2020.

Seminar ,Conferences and workshops attended

1) International Symposium on Nuclear physics organized by Bhabha Atomic Research centre Mumbai 400085, INDIA during December 18-22, 2000.

2) International conference on Radiation Protection (IARP_IC-2K1) held at Multipurpose Hall, Traning School Hostel, Anushaktinagar, Mumbai during February 20-23 2001.

3) National Conference on Microwaves and Optoelectronics (NCMO- 2004) Dr.B.A.M.University, Aurangabad-431004 June 29-30, 2004.

4) State Level Workshop on B.Sc. Physics Practicals (SLWPP_2004) Dept.of Physics Deogiri College, Aurangabad held on August 19, 2004.

5) State Level Workshop on B.Sc. Physics Practicals organized by Maulana Azad College on 16th September 2005.

6) State Level Seminar on "Women in Higher Education: Achievements and Challenges"organized by S.B.E.S.College of Science Aurangabad, on 6th and 7th October, 2006) and presented a paper.

7) State Level Workshop on"Office Administration : A continuum for Excellent management"Organised by R.B.Attal College Georai Dist. Beed. On December 29-30, 2006.

8) National Conference on current trends in materials research for advanced Technology (NCMRAT-2007) organized by Dr.B.A.M.University Aurangabad-431004 on 29th-31st Jan 2007.

9) Reginal Workshop on" Effective teaching methods in physics and scope of UGC Curricula. organized by Badrinarayan barwale mahavidyalaya Jalan. On 12th and 13th February 2007.

10) Workshop on "Virtual observatory and data analysis "organized by R.G. Bagadia college Jalna during 29-30 August 2007.

11) Workshop on "Effective Teaching In Physics/Electronics organized by Dept. of Physics Deogiri College, Aurangabad held on 3rd Feb.2008.

12) State Level Seminar on"Advanced study in solid state physics and Crystallography" organized by Balbhim college Beed held on 15th and 16th March 2008. and presented a paper.

13) Attend the workshop of "Materials science for energy storage "organized by Dept of Physics Anna University Chennai" from 18th January to 22nd January, 2010.

14) National conference on " Recent trends in thin film technology" organized by Dept of Physics Jijamata college of Science and Arts, Bhende Bk. Tal –Newasa,Dist –Ahmednagar,Maharashtra ,India. during 23-24, February 2010. Invited as a resource persons to deliver a speech on "Radiation attenuation Technique for film thickness measurement"

15) National conference on " Recent trends in thin film technology" organized by Dept of Physics Jijamata college of Science and Arts, Bhende Bk. Tal –Newasa,Dist –Ahmednagar,Maharashtra ,India. during 23-24, February 2010. and presented a paper

16) Attend the workshop of "Feminism, Literature and a Cry for Translation "organized by the Tarabai shinde Women's studies centre, Dr.B.A.M.University, Aurangabad from 26th and 27th February 2010.

17) International conference on "Lasers and advanced materials organized by Dept of Physics M.E.S.Abasaheb Garware College Karve Road, Pune-411004, Maharashtra, India. during 6-8, March 2010 and presented a paper

18) International symposium on the "Synthesis and Characterisation of Glass/Glass-ceramics (IWSSCGGC-2010)" organized by C MET Pune in association with Materials Research Society of India Pune 411 007 during July 9-10, 2010. paper is for poster presentation.

19) Attend Science Academies Lecture workshop on "Probing Electronic States in Molecules and Molecular Materials" organized by the Dept.of chemistry, Dr.B.A.M.University, Aurangabad from October 21to 25, 2010.

20) Attend International conference on sustainable environment Eco Revolution 2011 organized by Eco Needs Foundation in association with International Society of Science and Technology, Mumbai during 19-20 th February 2011 Aurangabad, Maharashtra, India.

20) Attend the workshop of "Right to Information"Inaugurated at Dept.of Mass Comm.and Journalism on 26th March 2011.

21) Attend the workshop of "Right to Information"Inaugurated at Dept.of Mass Comm.and Journalism on 26th March 2011.

22) Attend the National Workshop cum Seminar on "Physics Education Research: Research Based Reforms in Physics Instruction" organized in collaboration with Indian Association of Physics Teachers (IAPT) at St.Bede's College, Shimla from 22nd -29th May, 2011 and presented a paper.

23) Attend the National Symposium on Acoustics November 17-19,2011 NSA 2011 organized by Department of Physics Bundelkhand University, Jhansi-284128 U.P.-INDIA. and presented a Paper

24) Attend one day workshop on "Communication skills "organized by Academic staff college on 23rd Nov2011.

25) Attend the National workshop on "Nanotechnology and Intellectual Property Rights and Patents in Science and Technology from Nanotechnology Perspectives 16th -17th February- 2012.Organised by Department of Nanotechnology Dr.B.A.M.University Aurangabad-431004 Maharashtra, (India) and presented a research paper.

26) Attend INTERNATIONAL CONFERENCE ON GLOBAL TRENDS IN PURE AND APPLIED CHEMICAL SCIENCES 3rd -4th March 2012 Udaipur (Rajasthan) India and presented a research paper.

27) Attend the workshop of "Right to Information"Inaugurated at Dept.of Mass Comm.and Journalism on 13th March 2012.

28] Attended a conference at Bharati Vidyapeeth University, Pune (India) 'Nanocon 012'-IInd International Conference Nanotechnology-Innovative Materials,Processes,Products and Applications at Pune,India on 18,19 October 2012 and presented a poster on **"**Total interaction cross sections of L Arginine LR containing C, H, N, & O in the energy range 122-1330 KeV".

29] Attended a Two Day National Seminar on "Quality Enhancement in Higher Education -2012" Date:07th and 8th December 2012 and presented a paper on **"**Good Quality teachning and learning with ICT-A review" and worked as Chair Person in the Session III.

30] Attended one day workshop on Integrating GeoSpatial Technology with e-Governance of an Indian District(IGST-2013) organized by Dept. of Computer Science and IT.Dr.B.A.M.University on January 19,2013.

31] Attended DAE-BRNS 11th Biennial Symposium on Nuclear and Radiochemistry –NUCAR 2013 held at Govt.Model Science College (Autonomous),R.D.University,Jabalpur,during February 19-23,2013 and presented a poster.

32] Attended National Conference on Ennovative teaching methods in physics organized by Deogiri college Aurangabad on 30-31 August 2013.

33] Attended National Conference on Pharmacutical analysis organized by Dept.of chemical technology Dr.B.A.M.University Aurangabad on 18-19october 2013.

34] Attended National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013) OCTOBER 28-29,2013 organized by M.E.S. Abasaheb Garware College,Pune.and presented a paper and also worked as Chair Person in the Session.

35]Attended DAE-BRNS Fifth Symposium on Nuclear Analytical Chemistry (NAC-V) January 20-24,2014 Bhabha Atomic Research Centre Mumbai,India.

36]Attended National MEMS Design Center(NMDC), MEMS Design and Simulation Workshop organized by NMDC and supported by IEEE India SSCS Chapter and ISSSPune Chapter during 27th -31st January,2014.

37] Attended UGC Sponsored Two Days National Seminar on "Research Methodology in Physical Science"organized by Dept.of physics and chemistry Balbhim Arts,Science and Commerce College,Beed on 15th and 16th Feb.2014.

38] Attended Training Programme on Awareness of Scifinder Database organized by Knowledge Resource Centre (University Liberary),held at Dr.B.A.M.University Aurangabad,Maharashtra on 22nd july 2014.

39] Attended a conference at Bharati Vidyapeeth University, Pune (India) 'Nanocon 014'-IIIrd International Conference NANOCON014 Smart Materials,composites,Applications and New Inventions at Pune,India on **14,15** October 2014 and presented the poster title "Energy dependence of mass attenuation coefficients, effective atomic numbers and effective electron densities of saturated Undecylic fatty acid($C_{11}H_{22}O_2$), in the energy range 10 keV – 1500keV".

40] Attended a 'National Conference on Material science (NCMS-2014) at K.S.K.College Beed,India on 12,13 December, 2014 and presented a paper "Gamma Ray Spectrometric Analysis of Some Composite Materials: A Review" Vandana A. Tupe[1], **Pravina P.Pawar[2]** Satish B Shelke[3] and Pradnya R Maheshmalkar[4] Paper is accepted for oral presentation .

41] Attended Milliya college conference on 23-24 Dec 2014 and presented a paper entitled "Gamma Rays Interaction Studies of Composite Material: A Review "Vandana A. Tupe[1] and **Pravina P.Pawar[2]**

42] Attended Pre Science Congress on "Science and Technology for Human Development" December 30-31, 2014 organised by Dr.B.A.M.University Aurangabad and presented a paper entitled "A Comprehensive Investigation and Formulas for Mass Attenuation Coefficient, Effective Atomic Number and Electron Density for all Types of Materials, in the Energy Range 0.001-100 GeV"D.K.Gaikwad and **Pravina P.Pawar**.

43] Participated in Prof Babulal Saraf Memorial All India Laboratory Workshop on Experimental Physics For P.G.Teachers Sponsered by MPCST,IAPT &UDC-DAE-CSR,INDORE held at IPS Academy ,Indore From : February 2-7,2015.

44] Participated in Prof Babulal Saraf Memorial All India Laboratory Workshop on Experimental Physics For P.G.Teachers Sponsered by MPCST,IAPT &UDC-DAE-CSR,INDORE held at IPS Academy ,Indore From : February 2-7,2015.

45] Participated in One Day State Level Conference on "Examination Reforms: Challenges ahead" Organised by Dr.Babasaheb Ambedkar Marathwada University,Aurangabad Maharashtra and Vidyapeeth Vikas Manch,on 25th February 2015.

46] One day Acquaintance Progremme-2015 organised by Department of Physics Dr.B.A.M.University Aurangabad 431 004-Maharashtra on May 1,2015.

47] One day user Awareness Programme under UGC-INFONET Digital library consortium. organise by University library,Dr. B.M.U.Aurangabad on 9th October 2015.

48] University-Industry interaction Summit 2015 organized by Dr. B. A. M. University, Aurangabad from Oct. 29-30, 2015.

49] One day author workshop on "Scientific writing and publishing scholarly articles" jointly organized by knowledge resource centre(University library) Dr. B. A. M. University, Aurangabad and Springer on 04th Nov., 2015.

50] Participated in INTERNATIONAL CONFERENCE ON Functional materials and microwaves (ICFMM-2015)
December 28-30,2015 organized by Dept of Physics Dr. B. A. M. University, Aurangabad.

51] Participated in INTERNATIONAL CONFERENCE ON Radiation Research: Impact on Human Health and Environment (ICRR-HHE 2016) organised by Society for radiation research at Bhabha Atomic Research Centre,TSH,Anushaktinagar,Mumbai-94,India February 11-13,2016.

52] Participated in one day workshop on LATEX for Project,Seminar,Thesis Typesetting March 05, 2016 . organized by Department of Chemical Technology Dr. B. A. M. University, Aurangabad.

53] Participated in "National Conference on material science and renewable energy sources (NCMSRES-16) at Rajarshi Shahu Mahavidyalaya, Latur from 11-12 March 2016 paper entitled "Molar absorptivity for l-thioproline in the energy range 0.1-15 MeV" is accepted for two days National Conference.

54] Participated in International conference on recent development in engineering, science, management and humanities(ESMH-16) at MB college Latur,India on 13 March ,2016 and paper entitled " Effective atomic number for Cerium Oxide (Ce_2O_3) from 1-10^5 MeV" is accepted for International conference .

55] Participated in one day seminar on "Recent trends in therapeutics" by Professor Jaykumar Rajadas from Standford University, USA on July 5th, 2016. Organized by Paul Herbal Centre for DNA Barcoding and Biodiversity Studies.Dr.B.A.M.University Aurangabad.

56] Participated in one day workshop on "Intellectual Property Rights (IPR)" Organized by .Dr.B.A.M.University Aurangabad on 22nd August, 2016.

57] Attend the workshop of "Right to Information 2005 workshop"at Dr.B. A.M.University Aurangabad on 27th September 2016.

58] Attend " FACULTY DEVELOPMENT PROGRAM (F.D.P.) IN ENTREPRENEURSHIP " from 29-09-16 to 14-10-16 at M.C.E.D. A-38 M.I.D.C. Near Railway Station Aurangabad.

59] Attend "Opportunities in Gas Sensor Reserch" organized by RUSA-Cnter for Advanced Sensor Technology, Dr. Dr.B. A.M.University Aurangabad [MS] on Decermber 3,2016.

60] Attend " Training Programme on Awareness of SCOPUS AND Indian Citation I ndex" organized by Knowledge Resource Center [University Library], held Dr.B.A.M.University Aurangabad,on 22 December . 2016

61] Attend Two Days National Seminar on "QUALITY Sustenance and Quality Enhancement by IQAC at Instituation Level" held on form 31st Jan. to 1st Feb .2017, sponsored by NACC and organized by MGM

Dr. G.Y Pathrikar College of Computer Science and Information Technology, Aurangbad, Maharashtra ,India.

62] Attend 13th DAE –BRNS NUCLEAR AND RADIOCHEMISTRY SYMPOSIUM [NUCLER-2017] Organised by Bhabha Atomic Reserch Center , Trombay, Mumbai And INDIAN Association of Nuclear Chemists and Allied Scientists (IANCAS) ON 6th -10th February , 2017.

63] Attend Training Programme on Sexual Harassment of Women at Worksplace (Prevention ,Prohibtion and Redressal) Organised by Dr. B.A.M.University Aurangabad . on 21Feb 2017.

64] Attend Workshop on "Indian Patents a comprehensive Outreach" Organised by RUSA-Centre for Advanced Sensor Technology,DDU-KK and IQAC Dr. B.A.M.University Aurangabad . on 14-15 March 2017.

65] Attended one day familiarization workshop on " facilities available at RUSA Centre for Advanced Sensor Technology for Material Synthesis ,Characterization and Device Fabrication" Organised by RUSA-Centre for Advanced Sensor Technology, Dr. B.A.M.University Aurangabad . on 15 September 2017.

66] Attended one day Intellectual Properties Right (IPR) workshop on " Why,What,How?And Filing Indian Patents" Organised by RUSA-Centre for Advanced Sensor Technology, Dr. B.A.M.University Aurangabad . on 29 September 2017.

67] Attended one day Author workshop on " Scientific Writing and Publishing Scholarly Articles " . on 7th November 2017 at Knowledge Resource Center Dr. B.A.M.University Aurangabad .

68] Attended one day workshop on "Sextual Hareshment of womens at work place " on 19-03-2018 at Tarabai Shinde womens study centre Dr. B.A.M.University Aurangabad .

69] Attended blood donation camp and donate blood on 23-03 2018.

70] Attended Faculty Development Program for " Global Business Foundation Skills" conducted by Infosys BPM Ltd. At Pune from 21st to 29th August 2018.

71] Attended one day seminar on "Hindu Succession Act and Women" on 30th November -2018 at Tarabai Shinde womens study centre Dr. B.A.M.University Aurangabad .

72] Attended one day workshop on NPTEL on 1st Dec 2018.

73] Attended State Level Workshop on "E –content Development in Perspective of Teaching" at Deogiri college Aurangabad on 22-23 Dec 2018.

74] Attended "Awareness Program of McGraw Hill E-Books" . on 10th January 2019 at Knowledge Resource Center Dr. B.A.M.University Aurangabad .

75] Attended certificate course on " Understanding Dr. Ambedkar's Theory and Practice "at Tarabai Shinde womens study centre Dr. B.A.M.University Aurangabad on 21-25th Jan 2019.

76] Attended "Awareness Program of Science Direct and Mendeley" . on 27th June 2019 at Knowledge Resource Center Dr. B.A.M.University Aurangabad .

77] Attend one day workshop on Intellectual Property Rights (IPR) jointly organized by CMIA,S Marathwada Accelerator for Growth and Incubation Council (MAGIC) NRDC and Dr.B.A.M.University Aurangabad, Maharashtra. On 31st August 2019 at CFART Auditorium Dr.B.A.M.University.

78] Attended training programme on “Value based academic and leadership skills” on 30 september 2019 organised by department of computer science and information technology in collaboration with IQAC.

79] Aattended one day workshop on ” Intellectual property write” Indian perspective on October 5 2019. Organized by RUSA center for advanced censor technology Dr BAMU Aurangabad.

80] Paticipated in one day workshop on “ NAAC revice accridation framework “ organsed by internal quality assurance cell, Dr. BAMU Aurangabad on 7th March 2020.

81] Attended webinar on art of drafting Pre -PhD Synopsis on 2 May 2020 organised by Department of Physics Dr BAMU Aurangabad.

82] Participated in webinar on Covid 19 pendamic “ Indian cenario on 4th May 2020, Organised by department of physics , Shree Madhavrao Patil Mahavidyalaya Murum, Taluka Umergaon.

83] Participated in the webinar on material science, Technology and society on 8 - 9 th May 2020 organised by School of Physical science JNU New Delhi. 110067.

84] Participated in online Physics Quize of BSc third year paper xx” with score 100% organised by Department of Physics organised by R B. Atal art science, and Commerce college Georai District Beed Maharashtra India, during covid 19 pendamic outbreak dated on 18 may 2020.

85]Attended a webinar on “How to access Tailor And Francises Journals” on 19 may 2020 organised by marketing head journal Tayler And Francis Journal India.

86] Attended online “Coved 19 pendamic general awareness programme organised by department of compuer science Pratisthan mahvidyalaya Paithan District Aurangabad , Maharashtra state India. On 6 May 2020 with score of 100%.

87] Participated in the online short term cource “ Physics in daily life” during 25/4 /2020 to 01/05 /2020 organised by Swatantra vir Sawarkar Mahavidyalaya Beed.

88] Participated in 3rd International Conference on “Light Applications in Science and Engineering Research (LASER - 2023)” 14 – 16, September – 2023 MS – 22 Gamma ray interaction studies of Asafoetida sample using Co 60 source. Mrunal R. Pattekara*, Mohammad Adnan S. Kachchi, Kalidas B. Gaikwad, Pranoti A. Nikam, Farah Naaz, Priyanka G. Gughe, Pravina P. Pawar.

89] Participated in 3rd International Conference on “Light Applications in Science and Engineering Research (LASER - 2023)” 14 – 16, September – 2023 MS – 23 Molar extension coefficient of glass fiber in the energy range from 122 to 1330 keV. Pranoti A. Nikam*, Mrunal R. Pattekar, Mohammad Adnan S. Kachchi, Kalidas B. Gaikwad, Farah Naaz, Priyanka G. Ghuge, Pravina P. Pawar.

90] Participated in 3rd International Conference on “Light Applications in Science and Engineering Research (LASER - 2023)” 14 – 16, September – 2023 MS – 24 Linear attenuation coefficient of Poloxamer188 in the energy range from 0.122 to 0. 1330 MeV Priyanka G.Ghuge* Kalidas B. Gaikwad , Farah Naaz , Pranoti A. Nikam, Mrunal R. Pattekar, Mohammad Adnan S. Kachchi , Pravina P.Pawar.

91] Participated in 3rd International Conference on "Light Applications in Science and Engineering Research (LASER - 2023)" 14 – 16, September – 2023 NM-26 Farha Naaz Determination of total interaction cross section of Zirconium dioxide in the energy range from 0.122 to 1.330 MeV 129

92] Participated in 3rd International Conference on "Light Applications in Science and Engineering Research (LASER - 2023)" 14 – 16, September – 2023 NM-40 Kalidas B. Gaikwad Experimental and theoretical evaluation of gamma ray attenuation properties of Cu-ZnFe2O4 Ferrite nanoparticles 144

93] Participated in 3rd International Conference on "Light Applications in Science and Engineering Research (LASER - 2023)" 14 – 16, September – 2023 MS-19 Mohammad Adnan. S Gamma-ray interaction studies of uracil an organic compound in the energy range 122keV to 1330keV 43

Life membership:

(1) Life member of Indian Physics Association Membership No: AUR (Lm) 12604.

(2) Life member of the Journal of Acoustical Society of INDIA. New Delhi-110012.

(3) Applied for life member of the Indian Society for Radiation Physics (June 2016).

Refresher Course: Completed 11th refresher course in the subject of physics in Academic Staff College Dr. B.A.M.University Aurangabad on 04-03-2005 to 24-03-2005.

Orientation Course: Completed orientation course in the subject of physics in Academic Staff College Dr. B.A.M.University Aurangabad on 02-12-2007 to 30- 12-2007.

Special summer school programme: Completed UGC –Sponsored Special summer school programme scheduled from 23rd July to 11th August,2012.

Board of examiner:

- Paper setter of M.Sc. Examination from 2008- till
- Practical Examiner of M.Sc. Examination from 2008- till
- Appointed as a subject expert by the Vice-chancellor of the affiliated university for the selection committee for the post of assistant professor for the post of Physics dated 18/11/2019.
- Appointed as a seminar examiner on 28/11/2019 for a refresher course in advanced instrumentation (MD) from 18 November 2019 to 30 November 2019 organized by the UGC human resource development center. Dr.B.A.M. University, Aurangabad
- Nomination as a subject expert in Physics to be nominated by the chairperson of the governing body of the college on the selection committee for CAS. 30 January 2021
- National advisory committee member for the national conference on functional material scientists and characterization Techniques (NCFMSCT- 2021) Organized by the Department of physics, Vaidyanath College, Parali Vaijyanath on 2nd March 2021.
- Valued reviewer for Nuclear science and techniques Journals

- Member of Central committee for National Science Day 2020 (NSD-2020) at Dr. BAMU Aurangabad.
- Actively contributed in the National science day organized by Dr. BAMU Aurangabad from 27-28 Feb 2020. Contribution as member of the organizing committee.
- Valuable online talk for MSc physics students on the topic of Research methodology dated 17 August 2021 at 1 : 00 PM by Google Classroom.
- A Chief guest for an online lecture series on how we develop organized by Laxmibai Mahila Deshmukh Mahavidyalaya, Parli dated 29 January 2022 at 11 AM on Google Meet also lecture is given on the same topic.
- Appointed as an external examiner in Deogire College from 18 -21 July 2022 for MSc physics first-year practical.
- Appointed as a member for selection committee for currier advancement on 01/08 2022
- Appointment as an honorable vice chancellor Nominated represented for CAS 0n 10/08/2022
- Appointed as a subject expert in the CASS promotion dated on 16/12/2022.
- Appointed as a subject expert in CAS promotion dated on 17/12/2022.
- Appointed as a subject expert through CAS on 24/01/2023
- Invited as a Guest in Gujrati Kanya Vidyalaya on 22/02/2023.
- Appointed as member of selection committee Vice chancellor Subject expert for interviewing the candidate on 21/06/2023 at JES College Jalna.
- Appointed as aexaminer for PhD Viva Voce exam of Ganesh H Khedkar in SSSKR Innani Mahavidyalaya Karanja Lad on 25/07/2023.
- Appointed as amember of selection committee for the appointment of teachers on Contract basis dated on 27-28 July 2023.
- Appointment as the subject expert for BARTI fellowship up-gradation from JRF to SRF, 25/10/2023.

Extra –curricular activities:

1] Invited as a resource person to deliver a speech on "Radiation attenuation Technique for film thickness measurement "At the National conference on "Recent trends in thin film technology" organized by Dept of Physics Jijamata College of Science and Arts, Bhende Bk. Tal –Newasa, Dist –Ahmednagar, Maharashtra, India during 23-24, February 2010.

2] Attend the workshop of "Feminism, Literature and a Cry for Translation "organized by the Tarabai shinde Women's studies centre, Dr.B.A.M.University, Aurangabad from 26th and 27th February 2010.

3] Invited as a resource persons to examine seminar presentation to the participants of refresher course on 27 march 2012

4] Invited as a chair person in National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013)OCTOBER 28-29,2013 organized by M.E.S. Abasaheb Garware College, Pune.

5] Invited as a subject expert in physics to be nominated by the Chairperson of the governing body of the college on a selection committee for career Advancement Scheme. On 30th January 2019.at Dr. B.A.M. University Aurangabad

List of Publications in SCI Journals

Physical , structural and nuclear Readation Shielding Behavior of Ni- Cu-Zn Fe2O4 Ferrite Nanoparticles
KB Gaikwad, KP Gattu, CV More, MI Sayyed, KR Niras ,PP Pawar 2024
(Accepted Feb.2024) in Applied Radiation and Isotopes

Experimental evaluation of gamma radation attenuation properties of NiO.2MgxZnO.8-xFe2O4
KB Gaikwad, KP Gattu, CV More, MI Sayyed, KR Niras ,PP Pawar
Optical Materials 148, 114807,2024
2024

Estimation of neutron and gamma-ray attenuation characteristics of some ferrites: Geant4, FLUKA and WinXCom studies
CV More, F Akman, K Dilsiz, H Ogul, PP Pawar
Applied Radiation and Isotopes 197, 110803
2 2023

Development of water-based CuO, TiO_2 and ZnO nanofluids and comparative study of thermal conductivity and viscosity
NB Girhe, SN Botewad, CV More, SB Kadam, PP Pawar, AB Kadam
Pramana 97 (2), 68
1 2023

UPR/Titanium dioxide nanocomposite: Preparation, characterization and application in photon/neutron shielding
CV More, SN Botewad, F Akman, O Agar, PP Pawar
Applied Radiation and Isotopes 194, 110688
7 2023

Development of water-based CuO/GO/MWCNT ternary nanofluid and comparative study of thermal conductivity and viscosity with CuO, GO, MWCNTs mono nanofluids
N Girhe, S Botewad, P Pawar, A Kadam
Indian Journal of Physics 97 (4), 1137-1145
2023

Urea biosensors: A comprehensive review
SN Botewad, DK Gaikwad, NB Girhe, HN Thorat, PP Pawar 18 2023
Biotechnology and Applied Biochemistry 70 (2), 485-501

Development of water based CuO-GO binary nanofluid and study the effects of volume fraction, temperature on thermal, rheological properties
NB Girhe, SN Botewad, PP Pawar, AB Kadam
Physics and Chemistry of Liquids 61 (2), 117-127
2023

Solid-state reaction process for metal oxide nanostructures
VV Awasarmol, SD Raut, SK Gore, RS Mane, PP Pawar
Solution Methods for Metal Oxide Nanostructures, 77-94

1] Development of water based CuO-GO binary nanofluid and study the effects of volume fraction, 2022

temperature on thermal, rheological properties
NB Girhe, SN Botewad, PP Pawar, AB Kadam
Physics and Chemistry of Liquids, 1-11

2] Development of water-based CuO/GO/MWCNT ternary nanofluid and comparative study of thermal conductivity and viscosity with CuO, GO, MWCNTs mono nanofluids
N Girhe, S Botewad, P Pawar, A Kadam
Indian Journal of Physics, 1-9 2022

3] Ultrasensitive polyaniline-nickel oxide cladding modified with urease immobilized intrinsic optical fiber urea biosensor
SN Botewad, DK Gaikwad, NB Girhe, PP Pawar
Polymers for Advanced Technologies 33 (1), 189-197 2022

4] Evaluation of gamma ray and neutron attenuation capability of thermoplastic polymers
CV More, H Alavian, PP Pawar
Applied Radiation and Isotopes 176, 109884 2 2021

5] Polymeric composite materials for radiation shielding: A review
CV More, Z Alsayed, M Badawi, A Thabet, PP Pawar
Environmental Chemistry Letters 19 (3), 2057-2090 98 2021

6] Urea biosensors: A comprehensive review
SN Botewad, DK Gaikwad, NB Girhe, HN Thorat, PP Pawar
Biotechnology and Applied Biochemistry 10 2021

7] Evaluation of gamma-ray attenuation characteristics of some thermoplastic polymers: Experimental, WinXCom and MCNPX studies
CV More, H Alavian, PP Pawar
Journal of Non-Crystalline Solids 546, 120277 17 2020

8] PANI-ZnO cladding-modified optical fiber biosensor for urea sensing based on evanescent wave absorption
SN Botewad, VG Pahurkar, GG Muley, DK Gaikwad, GA Bodkhe, ...
Frontiers in Materials 7, 184 12 2020

9] Extensive theoretical study of gamma-ray shielding parameters using epoxy resin-metal chloride mixtures
CV More, PP Pawar, MS Badawi, AA Thabet
Nuclear Technology and Radiation Protection 35 (2), 138-149 7 2020

10] Analysis of half value layer (HVL), Tenth value layer (TVL) and mean free path (MFP) of some oxides in the energy range of 122KeV to 1330KeV
PS Dahinde, GP Dapke, SD Raut, RR Bhosale, PP Pawar
Indian J. Sci. Res 9 (2), 79-84 3 2019

11] Physical, structural, optical investigation and shielding featuresof tungsten bismuth tellurite based glasses Authors DK Gaikwad, MI Sayyed, SN Botewad, Shamsan S Obaid, ZY Khattari, UP Gawai, Feras Afaneh, MD Shirshat, PP Pawar Publication date 2019/1/15 Journal Journal of Non-Crystalline Solids Volume 503 Pages158-168

12] ANALYSIS OF HALF VALUE LAYER (HVL), TENTH VALUE LAYER (TVL) AND MEAN FREE PATH (MFP) OF SOME OXIDES IN THE ENERGY RANGE OF 122KeV to 1330KeV
Authors Pradip S Dahinde, GP Dapke, SD Raut, RR Bhosale, Pravina P Pawar Publication date 2019/1/1 Journal Indian Journal of Scientific Research Volume 9 Issue 2 Pages79-85

13] Photon attenuation coefficients of different rock samples using MCNPX, Geant4 simulation codes and experimental results: a comparison study
Authors Shamsan S Obaid, MI Sayyed, DK Gaikwad, HO Tekin, Y Elmahroug, PP Pawar
Publication date 2018/12/2
Journal Radiation Effects and Defects in Solids
Volume 173 Issue 11-12 Pages900-914

14] Gamma ray shielding properties of TeO2-ZnF2-As2O3-Sm2O3 glasses
AuthorsDK Gaikwad, MI Sayyed, Shamsan S Obaid, Shams AM Issa, PP Pawar
Publication date2018/10/15JournalJournal of Alloys and Compounds
Volume765Pages451-458

15] STUDIES ON MASS ATTENUATION COEFFICIENT, MOLAR EXTINCTION COEFFICIENT AND EFFECTIVE ATOMIC NUMBER OF SOME OXIDES IN THE ENERGY RANGE OF 122-1330KEV
AuthorsPradip S Dahinde, Pravina P Pawar, RR Bhosale, SD Raut
Publication date2018/8/1
JournalIndian Journal of Scientific Research
Volume9Issue1Pages97-111

16] Comparative study of gamma ray shielding competence of WO3-TeO2-PbO glass system to different glasses and concretes
AuthorsDK Gaikwad, Shamsan S Obaid, MI Sayyed, RR Bhosale, VV Awasarmol, Ashok Kumar, MD Shirsat, PP PawarPublication date2018/7/1JournalMaterials Chemistry and Physics
Volume213Pages508-517

17] S. S. Obaid, M.I. Sayyed, D.K. Gaikwad, P. P. Pawar, Attenuation coefficients and exposure buildup factor of some rocks for gamma ray shielding applications Radiation Physics and Chemistry 148 (2018) 86–94.

18] S. D. Raut, V. V. Awasarmol, B. G. Ghule, S. F. Shaikh, S. K. Gore , R .P.Sharma, P. P. Pawar, R. S. Mane, Enhancement in room-temperature ammonia sensor activity of size reduced cobalt ferrite nanoparticles on γ-irradiation Mater.Res. Express 5 (2018) 065035.

19] S. D. Raut , V. V. Awasarmol, B. G. Ghule, S. F. Shaikh, S. K. Gore, R. P.Sharma, P. P. Pawar, R S Mane, γ-irradiation induced zinc ferrites and their enhanced room temperature ammonia gas sensing properties, Mater. Res. Express 5 (2018) 035702.

20] S. D. Raut, V. V. Awasarmol, S. F. Shaikh, B. G. Ghule, S. U. Ekarb, R. S. Mane,P. P. Pawar, Study of gamma ray energy absorption and exposure buildup factors for ferrites by geometric progression fitting method, Radiation Effects & Defects In Solids,(2018) 1-9.

21] D.K. Gaikwad, S. S. Obaid, M.I. Sayyed, R.R. Bhosale, V.V. Awasarmol, A.Kumar, M.D. Shirsat, P.P. Pawar, Comparative study of gamma ray shielding competence of WO3-TeO2- PbO glass system to different glasses and concretes, Materials Chemistry and Physics 213 (2018) 508-517.

22] S. S. Obaid, D. K. Gaikwad, P. P. Pawar, Determination of gamma ray shielding parameters of rocks and concrete, Radiation Physics and Chemistry 144 (2018) 356–360.

23] R. M. Lokhande, C.V. More, B. S. Surung, P. P. Pawar, Determination of attenuation parameters and energy absorption build-up factor of amine group materials, Radiation Physics and Chemistry 141 (2017) 292–299.

24] R. R. Bhosale, C. V. More, D. K. Gaikwad, P. P. Pawar, M. N. Rode, Radiation Shielding and Gamma Ray Attenation Properties of Some Polymers, Nuclear Technology & Radiation Protection, 32 (2017) 288-293.28

25] D. K. Gaikwad, P. P. Pawar, T. P. Selvam, Mass attenuation coefficients and effective atomic numbers of biological compounds for gamma ray interactions. Radiation Physics and Chemistry. 138 (2017) 75-80.

26] C. V. More, R. R. Bhosale, P. P. Pawar, Detection of new polymer materials as gamma-ray-shielding materials. Radiation Effects and Defects in Solids, 172 (2017) 1-16.

27] V.V. Awasarmol, D.K. Gaikwad, S.D. Raut, P.P. Pawar, Gamma ray interaction studies of organic nonlinear optical materials in the energy range 122 keV–1330 keV, Results in Physics 7 (2017) 272–279.

28] V. V. Awasarmol, D. K. Gaikwad, S. D. Raut, P. P. Pawar, Photon interaction study of organic nonlinear optical materials in the energy range122–1330keV, Radiation Physics and Chemistry 130 (2017) 346 –350.

29] C. V. More, R. R. Bhosale, P. P. Pawar, Detection of new polymer materials as gamma-ray-shielding materials, Radiation Effects and Defects in Solids, (2017).

30] R. M. Lokhande, C. V. More, B. S. Surung, S. D. Raut, P. P. Pawar, Measurements of Radiological Data of Some Amino Acids In The Energy Range 0.122-1.330MeV, AIP Conference Proceedings 1728, 020207 (2016).

31] C.V. More, R. M. Lokhande, P. P. Pawar, Mass energy-absorption coefficients and average atomic energy-absorption crosssections for amino acids in the energy range 0.122-1.330 MeV, AIP Conference Proceedings 1728, 020163 (2016).

32] R. R. Bhosale, D. K. Gaikwad, P. P. Pawar, M. N. Rode. Effects of gamma irradiation on some chemicals using NaI (Tl) detector, Radiation Effects and Defects in Solids, (2016).

33] R. R. Bhosale, D. K. Gaikwad, P. P. Pawar , M, N. Rode, Interaction Studies And Gamma-Ray Properties Of Some Low-Z Materials, Nuclear Technology & Radiation Protection: 31(2016)135-141.

34] P.S. Kore, P. P. Pawar, T. P. Selvam Evaluation of radiological data of some saturated fatty acids using gamma ray spectrometry, Radiation Physics and Chemistry 119 (2016) 74–79.

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1. Recognition/Fellowship/Awards(National/International):

1] Awarded by Ist grade (Paper –Presentation) in International conference on recent development in engineering, science, management and humanities(ESMH-16) at MB college Latur,India on 13 March ,2016 and paper entitled " Effective atomic number for Cerium Oxide (Ce_2O_3) from 1-10^5 MeV" is oral presentation in International conference .

2] Awarded by "Lokmat Sakhi Gaurav Puraskar-2015."for excellent work performed in educational field.

3] Chair person at National Conference on Emerging trends in Lasers And advanced Materials (NCETLAM 2013) OCTOBER 28-29,2013 organized by M.E.S. Abasaheb Garware College, Pune.

4] Chair person at Two Day National Seminar on "Quality Enhancement in Higher Education -2012" Date:07th and 8th December 2012 organised by Dept of Physics ,Parali and presented a paper on "Good Quality teaching and learning with ICT-A review".

5] Invited speaker at National conference on " Recent trends in thin film technology" organized by Dept of Physics Jijamata college of Science and Arts, Bhende Bk. Tal –Newasa, Dist –Ahmednagar, Maharashtra, India. during 23-24, February 2010.

6] Selected for National merit scholarship and M.Sc. Physics Dept. first scholarship.

2. Research Projects (Ongoing/Completed) and infrastructure created:

Sr. No.	Projects	Title of Project	Funding Agencies	Sanctioned amount
1.	Completed (May 2014 to May 2016)	Establishment of radiological data for bio-molecules using gamma ray spectrometry	DAE-BRNS	15,65,100 /-
2.	Completed (Feb 2011 to Feb 2014)	Attenuation coefficient measurements of gamma ray photons with biological samples	UGC	06,80,500 /-

3. Infrastructure created: Major equipment has been procured and received on 13th March 2015 "GAMMA RAY SPECTROSCOPY SYSTEM WITH USB BASED 8K MCA CARD WITH SOFTWARE AND DEDICATED COMPUTER" from NUCLEONIX systems private limited Hyderabad India.

4. Academic/Industrial Collaborations (National/International): DAE–BRNS Major Research Project in Collaboration with BARC Mumbai.

5. Total Number of Research Publications (Science Citation Index Papers): 10 (Indian journal of pure and applied physics, Radiation Physics and Chemistry and Pramana Journal, J. Nucl Technology and Radiation protection, J. rad effects and defects in solids)

6.Total Number of Research Publications Having ISBN/ISSN Number: 61 Total Award/Books Edited/Written (with ISBN Number):

7. One book written entitled "An Introduction to Nuclear Radiation & Health Physics" with ISBN number: ISBN- 978-81-926841-4-7. On 1st November 2013.

8. One book written entitled "Complete Solution Of Problems In Physics For 12Th Science" with ISBN number: ISBN- 9788195987122. On 7th December 2022.

9 One book written entitled "Nuclear Physics Dictionary" with ISBN number: ISBN978-93-95004-30-5. On 2023.

10.Total Number of Citations (As per Google Scholar): Citations: 2691

11. H-index 26

I10-index: 42

12. Number of students supervised for M.Phil. & Ph.D.: Students working for Ph.D.

Total number of students working at present 05

Total number of students 19

Ph. D. awarded 14 Indian student 13 + Foreign student 01 = 14

13. Patents/Consultancy etc.: Patents/Consultancy work is in progress with medical colleges, hospitals and agricultural institutes.

14. Professor Pravina Sanjay Ugile (Pawar) achieved position in Top 2% Scientists Worldwide list jointly Published by Stanford University and Elsevier for the year 2021.