CURRICULUM VITAE

Dr. Vishal Vishwanath Awasarmol

M.Sc., Ph.D. (Physics)

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Academic Profile:

DEGREE	BOARD OF STUDY	YEAR OF PASSING	Specialization	PERCENTAGE OBTAINED
Ph. D.	Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	October 2018	Physics	NA
M. Sc.	Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	June 2013	Physics	75.07%
B. Sc.	Milind College of Science, Aurangabad	December 2010	Physics, Electronics, Computer Science	57.40%
12th	MES Junior College, Mehkar, Amravati Divisional Board	February 2007	Physics, Chemistry, Biology, Mathematics	50.17%
10th	MES Junior College, Mehkar, Amravati Divisional Board	March 2005	Marathi, English, Science, Mathematics	61.60%

Personal Profile:

Name : Dr. Vishal Vishwanath Awasarmol

Father's Name : Mr. Vishwanath Raibhan Awasarmol

Date of Birth : 17th January, 1990

Age : 32 years

Category : SC

Marital Status : Married

Sex : Male

Nationality : Indian

Languages known : Marathi, English, Hindi

Hobbies : Reading, Cricket, Swimming, Photography, Playing games

Teaching Experience:

- One year teaching experience in Satyajeet International English School (CBSE) as a Physics teacher.
- Working as Assistant Professor in Physics at Swami Vivekanand Senior College, Mantha from 19/11/2019 to till date.

Research Experience:

- **Subject of Doctoral research:** Evaluation of Attenuation coefficient Data of Some Nonlinear Optical Materials Using NaI (Tl) Scintillation Detector.

International/National Fellowship/ Award:

- Awarded National fellowship under UGC-Rajiv Gandhi National Fellowship program.

Co-curricular & Extra-curricular activities:

- Information and computer technology under the UGC career oriented programme in the academic year 2007-2008.
- Mobile Science Exhibition Programme organised by Nehru Science Centre, Mumbai on the eve of University Foundation Day at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 22-23 August 2012.
- Attended the PhD Teaching program, Semester-I (August 2015- December 2015) at IUAC New Delhi

Faculty Induction Program:

- Online Guru Dakshta Faculty Induction Programme (FIP) on 03-10-2020 to 07-11- 2020 organized by UGC-HRDC Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Faculty Development Program:

- One Week Faculty Development Program (FDP) on Research Methodology during 10 to 14 August 2020 organized by Digambarrao Bindu Arts Commerce and Science College, Bhokar, Dist Nanded and Swami Ramanand Teerth Marathwada University, Nanded.
- One Week Faculty Development Program (FDP) on 09-11-2021 to 13-11-2021 organized by SPPU, UGC- HRDC and Indira College of Commerce and Science, Pune.

Refresher Course:

- Online Two Week Refresher Course in Physics on 27-10-2021 to 10-11-2021 and obtained A+ grade, organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- Online Refresher Course in the subject Disaster Management on 09-08-2021 to 25-08-2021 and obtained A grade, organized by UGC-HRDC Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Certificate Course:

- Online Certificate Course on "Nanomaterials Synthesis and Characterization Techniques (NSCT-2020) on 27-07-2020 to 15-08-2020 and obtained A+ grade, as prescribed and ported by Department of Physics, Shri. Shivaji Science College, Amravati.

Short Term Course:

- The International Short Term Training Programme-2 on Impact and Panacea of Environmental Pollution: The Past, Present and Future Organized by Raj Rishi Government Autonomous College from 20^{th} -26^{th} April 2022.
- The International Short Term Training Programme-3 on "Contrivance of Sustainable Development Goals (SDGs) for Environmental Conservation" Organized by Raj Rishi Government Autonomous College from 24^{th}-30^{th} June 2022.
- The International Short Term Training Programme-4 on "On Methods, Modeling, Data and Tools of Environmental Conservation" Organized by Raj Rishi Government Autonomous College from 01^{th}-07^{th} November 2022.

- The International Short Term Training Programme-5 on "On Production and Regulation of Chemicals and Toxins for Environmental" Organized by Raj Rishi Government Autonomous College from 07^{th}-13^{th} December 2022.

Research Papers Published in National /International Journals:

1. Gamma ray interaction studies on mass attenuation coefficient and molar extinction coefficient of 5-nitrouracil in the energy range 356keV -1330 keV. **Vishal V. Awasarmol**, D. K. Gaikwad, S. D. Raut, R. R. Bhosale, P. P. Pawar, M. B. Solunke, (2015), Bionano Frontier, Vol.8 Issue-3, 79-80.
2. Comparative study of Effective Atomic Number and Electron Density for Nanomaterial in wide energy range (10^{-3} to 10^{5} MeV). S. D. Raut, R. M. Lokhande, **Vishal V. Awasarmol**, R. R. Bhosale, C. V. More, P. P. Pawar, (2015), Bionano Frontier, Vol.8 Issue-3, 77-78.
3. Effective Atomic Numbers for Some Low –Z Materials. R. R. Bhosale, D. K. Gaikwad P. S. Kore, S. D. Raut, **Vishal V. Awasarmol**, C. V. More, P. P. Pawar, M. N Rode, (2015), Bionano Frontier, Vol. 8, Issue-3, 90-92.
4. Study on the Gamma Ray Attenuation Cross-Sections, Effective Atomic Numbers of Mesolite and Gryolite. D. K. Gaikwad, R. R. Bhosale, S. Obaid, **Vishal V. Awasarmol**, R. Lokhande, P. Kore, B. Ladhaf, S. Raut, C. V. More, P. P. Pawar, (2015), Bionano Frontier, Vol.8 Issue-3, 137-140.
5. Photon mass energy-absorption coefficients for amino acids C. V. More, S. D. Raut, R. M. Lokhande, **Vishal V. Awasarmol**, R. R. Bhosale, P. P. Pawar, (2015), Bionano Frontier, Vol.8 Issue-3, 141-143.
6. Effective atomic number and effective electron density of nanomaterials: A Comparative study. S. D. Raut, **Vishal V. Awasarmol**, P. P. Pawar, B. H. Devmunde, M. B. Solunke, (2016), International Journal of Advanced Research in Basic and Applied Sciences, Vol. 2, Issue 2, 35-37.
7. Studies on effective atomic number and effective electron density of 2-aminoflurene in the energy range 122 keV to 1330 keV. **Vishal V. Awasarmol**, S. D. Raut, P. P. Pawar, B. H. Devmunde, M. B. Solunke, (2016), International Journal of Advanced Research in Basic and Applied Sciences, Vol. 2, Issue 2, 13-15.
8. Photon interaction study of organic nonlinear optical materials in the energy range 122 keV

to 1330 keV. **Vishal V. Awasarmol**, D. K. Gaikwad, S. D. Raut, P. P. Pawar, (2017), Radiation Physics and Chemistry, Vol. 130, 343-350.

9. Gamma ray interaction studies of organic nonlinear optical materials in the energy range 122 keV-1330 keV. **Vishal V. Awasarmol**, D. K. Gaikwad, S. D. Raut, P. P. Pawar, (2017), Results in Physics, Vol. 7, 272-279.
10. Gamma ray attenuation parameters of inorganic nonlinear optical materials in the energy range 122 keV to 1330 keV. **Vishal V. Awasarmol,** (2017), Indian Journal of Pure and Applied Physics, Vol. 55, 65-72.
11. Effective atomic numbers and effective electron densities of inorganic nonlinear optical materials in the energy range 356 keV to 1330 keV. **Vishal V. Awasarmol**, P. P. Pawar, M. B. Solunke, (2017), International journal of technical research and science, Vol. 2, Issue 1, 26-29.
12. Half and tenth value layer of some shape memory alloys in the energy range 122 keV to 1330 keV. **Vishal V. Awasarmol**, G. P. Dapke, D. K. Gaikwad, P. P. Pawar, (2017), International journal of technical research and science, Vol. 2, Issue 5, 299-302.
13. Studies on attenuation cross section parameters of some shape memory alloys in the energy range 356 keV to 1330 keV. G. P. Dapke, **Vishal V. Awasarmol**, D. K. Gaikwad, S. D. Raut, P. P. Pawar, (2017), Indian Journal of Scientific Research, Vol. 8 Issue 1, 23-30.
14. Gamma ray interaction studies on some shape memory alloys in the energy range 122 keV to 1330 keV. G. P. Dapke, **Vishal V. Awasarmol**, S. D. Raut, P. P. Pawar, (2017), Scholarly Research Journal for Interdisciplinary Studies, Vol. 4 Issue 36, 8018-8026, https://doi.org/10.21922/srjis.v4i36.10194.
15. γ-irradiation induced zinc ferrites and their enhanced room-temperature ammonia gas sensing properties. S. D. Raut, **Vishal V. Awasarmol**, B. G. Ghule, S. F. Shaik, S. K. Gore, R. P. Sharma, P. P. Pawar, R. S. Mane, (2018), Materials Research Express, *5*(3), 035702.
16. Corrigendum: γ-irradiation induced zinc ferrites and their enhanced room-temperature ammonia gas sensing properties. S. D. Raut, **Vishal V. Awasarmol**, B. G. Ghule, S. F. Shaikh, S. K. Gore, R. P. Sharma, P. P. Pawar, R. S. Mane, (2018), Materials Research Express, 5(4), 049501.
17. Study of gamma ray energy absorption and exposure buildup factors for ferrites by geometric progression fitting method. S. D. Raut, **Vishal V. Awasarmol**, S. F. Shaik, B. G.

Ghule, S. U. Ekar, R. S. Mane, P. P. Pawar, (2018), Radiation Effects and Defects in Solids. 173(3-4), 329-338.

18. Enhancement in room temperature ammonia sensor activity of cobalt ferrite nanoparticles on gamma irradiation effect of size reduction and promoted surface area. S. D. Raut, **Vishal V. Awasarmol**, Balaji Ghule, Shoyab Mohamad, Shyam Gore, Rashmi Sharma, Pravina Pawar and Rajaram Mane, (2018), Materials Research Express. Mater. Res. Express 5, 065035.
19. Comparative study of gamma ray shielding competence of WO_3-TeO_2-PbO glass system to different glasses and concretes. D. K. Gaikwad, Shamsan S. Obaid, M.I. Sayyed, R.R. Bhosale, **Vishal V. Awasarmol**, Ashok Kumar, M. D. Shirsat, P.P. Pawar, (2018), Journal Materials Chemistry and Physics. 213; 508-517.
20. Study of radiological parameters of smart material using gamma ray spectrometry. S.S. Pawar, **Vishal V. Awasarmol**, S.D. Raut, P.P. Pawar (2019), Power of Knowledge, Vol. 3, 2, 1-5.
21. Determination of Photon attenuation parameters of smart materials. S.S. Pawar, **Vishal V. Awasarmol**, S.D. Raut, B.S. Kharat, P.P. Pawar (2019), Power of Knowledge Vol.3, 3, 87-93.
22. Gamma-ray attenuation properties of some NLO materials: potential use in dosimetry. M.S. Al-Burlahi, V.P. Singh, Halll Arslan, **Vishal V. Awasarmol**, Barls T. Tonguc, (2019), Radiation and Environmental Biophysics, https://doi.org/10.1007/s00411-019-00824-y.
23. Photon interaction smart materials using gamma ray spectrometry. S.S. Pawar, B.S. Kharat, **Vishal V. Awasarmol**, P.P. Pawar (2020), Our Heriatge, Vol. 65, 38, 265-273.
24. Attenuation parameters of temperature responsive polymer using gamma ray spectrometry. S.S. Pawar, **Vishal V. Awasarmol**, S.D. Raut, B.S. Kharat, P.P. Pawar (2020), The international of analytical and experimental model analysis, Vol. 12, 5, 1797-1806.
25. Gamma Radiation Studies on Organic Nonlinear Optical Materials in the Energy Range 122-1330 keV. Vishal V. Awasarmol, D.K. Gaikwad, S. Obaid, P.P. Pawar (2020), Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, Vol. 90 (5): 839-844.

Conference/Workshop/Symposium/Seminar/School; Presented and Attended:

1. International conference "BLAZE-2014" organized by Department of Mechanical Engineering on 13th-14th March-2014.
2. "Pre-Science Comgress-2014" on December 30-31, 2014 held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
3. One Day Author Workshop on "Scientific Writing and Publishing Scholarly Articles" organized by Knowledge Resource Center (University Library), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 4th November 2015.
4. International conference on "FUNCTIONAL MATERIALS AND MICROWAVES" (ICFMM-2015) organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 28-30 December, 2015.
5. One Day Workshop on "LATEX for Project, Seminar, Thesis Typesetting" on 5 March 2016, held at Chemical Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
6. One Day Workshop on "Intellectual Property Rights (IPR)" on 22 August 2016 held at CFART Auditorium, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
7. Training Programme on "Awareness of SCOPUS and INDIAN CIATATION INDEX" held on 22nd December 2016 organized by Knowledge Resource Center (University Library) held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
8. One Day Familiarization Workshop on "Opportunities in Gas Sensor Research" on December 3, 2016 organized by RUSA-Center for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
9. One Day Intellectual Property Right Workshop on "Patents-Why, What, How?" on December 30, 2016 organized by RUSA-Center for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
10. "104th Indian Science Congress" held at S. V. University, Tirupati from January 3-7, 2017.
11. "13th DAE –BRNS NUCLEAR AND RADIOCHEMISTRY SYMPOSIUM [NUCLER-2017]" held during 6th-10th February, 2017 organized by Bhabha Atomic Research Center, Trombay, Mumbai and INDIAN Association of Nuclear Chemists and Allied Scientists (IANCAS).
12. Workshop on "Indian Patents a comprehensive Outreach" held during 14-15 March 2017,

organized by RUSA-Centre for Advanced Sensor Technology, DDU-KK and IQAC, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

13. "National Seminar on Materials Science, X-ray and Gamma Ray Spectroscopies" organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad held during 29-30 March-2017.
14. One Day Familiarization Workshop on "Facilities available at RUSA-Centre for Advanced Sensor Technology for Material Synthesis, Characterization and Device Fabrication" on 15 September, 2017 organized by RUSA-Center for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
15. One Day Intellectual Property Right Workshop on "Patents-Why, What, How? And Filing Indian Patents" on 29 September, 2017 organized by RUSA-Center for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
16. One Day National Conference on "Recent Trands and Development in Material Science" on 16 December 2017 organized by Department of Physics, Indraraj Arts, Commerce and Science College, Sillod, Aurangabad.
17. One Day National Conference on "Recent Advances in Science" organized by Shivaji Arts, Commerce and Science College, Kannad, Dist. Aurangabad held on 13-February-2020.
18. National Virtual Conference on "Impact of INNOTAL Project on Dr. Babasaheb Ambedkar Marathwada University: An Exhilarating Journey from Dusk to Dawn" on 25-September 2021 organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, under the aegis of INNOTAL Project which is co-funded by the Erasmus+ programme of European Union.
19. 1st International Conference on "Multidisciplinary Research and Innovative Developments (ICMRID-2021)" on 13th to 18th December 2021 organized by Department of Physics and Mathematics, Government College, Manawar, District Dhar, M.P. India.
20. National E-Workshop on "Advanced Instrumentation" jointly organized by Department of Life Sciences, Bapumiya Sirajoddin Patel Arts, Commerce and Science College, Pimpalgaon Kale and Karmaveer Bhaurao Patil College, Vashi under IQAC on 22 and 23 December 2021.
21. International Seminar on Emerging Trends and Practices in Environmental Conservation on 5th to 7th June 2022 organized by Department of Life Science and Botany, Raj Rishi Government Autonomous College, Alwar, Rajastan, India.

22. NEP 2020 Workshop on " Educational Framework for Global Citizenship in HE" organized by UGC- Dr. Babasaheb Ambedkar Marathwada University, Aurangabad held on 27th to 30th July 2022.
23. Two days International Workshop on " Recent Trends in Nuclear Science and Material Science" organized by Department of Physics, Arts, Commerce and Science College, Kille Dharur Dist. Beed and Bhagwan Mahavidyalaya Asti, Dist. Beed held on 05th and 06th September 2022
24. International Seminar on "Impact of Ozone Layer Depletion on Climate Change on 16th September 2022 organized by Raj Rishi Government Autonomous College, Alwar, Rajastan, India.

Research Papers Published in Conference/Symposium:

1. Paper entitled "The study of radiological parameters of inorganic nonlinear optical materials in the energy range 356 keV -1330 keV." is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University, Bhubaneswar during February 6-10, 2017 organised by Bhabha Atomic Research Centre in association with KIIT University, Bhubaneswar. **Vishal V. Awasarmol**, S. D. Raut, D. K. Gaikwad, P. P. Pawar.
2. 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. R. R. Bhosale, D. K. Gaikwad, C. V. More, **Vishal V. Awasarmol**, P. S. Kore, P. P. Pawar.
3. Paper entitled "Gamma ray shielding properties of natural mineral celadonite" is accepted for 13th national Symposium on Nuclear and Radiochemistry at KIIT University, Bhubaneswar during February 6-10, 2017 organized by Bhaba Atomic Research Centre in association with KIIT University, Bhubaneswar. D. K. Gaikwad, R. R. Bhosale, **Vishal V. Awasarmol**, S. D. Raut, S. Obaid, R. M. Lokhande, P. P. Pawar.
4. 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. S. Obaid, D. K. Gaikwad, **Vishal V. Awasarmol**, P. P. Pawar.

5. Paper entitled "Effective atomic number and effective electron density of Barium ferrite and barium hexaferrite in the energy range 122 keV to 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. S. D. Raut, **Vishal V. Awasarmol**, D. K. Gaikwad, P. P. Pawar.

Online Webinars:

1. One Day National Webinar on Intellectual Property Right (IPR) and Indian Patent Filing System on 09-06-2020 organized by Department of Physics and IQAC of Swami Vivekanand Senior College, Mantha.
2. One Day National Webinar on A Challenge of Rising Inflation in Indian Economy on 21-09-2021 organized by Department of Economics and IQAC of Shivaji College, Hingoli.
3. One Day National Webinar on Recent Trends in Mathematics on 12-10-2021 organized by Department of Mathematics and IQAC of Dadasheb Jotiram Godse Arts, Commerce, Science College, Vaduj, Tq. Khatav, Dist. Satara.
4. One Day National Webinar on Carrier Opportunities in Physics on 14-10-2021 organized by Department of Physics and IQAC of Dadasheb Jotiram Godse Arts, Commerce, Science College, Vaduj, Tq. Khatav, Dist. Satara.
5. One Day National Webinar on Personal Finance Management and Wealth Creation for Startup–a Roadmap on 18-04-2022 organized by Department of Commerce, Swami Vivekanand Senior College, Mantha.
6. One Day National Level Webinar on "In-situ Depth profiling for radon concentration contained by underground soil gas: Experimental set-up and Measurements Protocols" organized by Department of Chemistry, Kalna College, Kalna, Dist. Purba Bardhaman, West Bengal on 30th August 2022.

Date: / /

Yours faithfully

Dr. Vishal V. Awasarmol