



Dr. Md Zaheer Ansari

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Web of Science

Personal:

Born on May 12, 1983.

Blood Group O⁺

Indian Citizen

Married, one children

Residents, Dhanbad, Jharkhand.

Academic Qualifications:

- **Ph.D.** (Applied Physics), Indian Institute of Technology (Indian School of Mines), Dhanbad, India, 2016
Thesis title: *Dynamic Laser Speckle Techniques and Their Applications.*
- **M.Phil.** (Applied Physics), Indian Institute of Technology (Indian School of Mines), Dhanbad, India, 2008.
Thesis title: *Study of monochromatic aberrations of two hololens imaging system.*
- **M.Sc.** (Physics), Vinoba Bhave University, Jharkhand, India, 2007.
- **B.Sc.** (Physics), Vinoba Bhave University, Jharkhand, India, 2004.
- **Intermediate** (Physics, Chemistry, Mathematics), (Jharkhand Academic Council, Ranchi), D.A.V+2 High school, Katrasgarh, India, 2001.
- **High School** (Bihar School Examination Board, Patna), T.A.P High School, Topchanchi, India, 1999.

Total Experience: [15 years]

Pre-PhD Research Experience: [3 years & 3 months]

Project Fellow D.S.T. Project [SR/S2/LOP-07/2005] from 29 July 2008 to 23 October 2011.
Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad, India.

Project Title: High-resolution retinal imaging of living eye through Adaptive Optics.

Post Doctoral Experience: [4.5 years]

1. **Post Doctoral Fellow**, Cochin University of Science and Technology, Kerala, India, May 26, 2017 to May 25, 2020.
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2. **Post Doctoral Fellow** (under RUSA grant), Cochin University of Science and Technology, Kerala, India, October 21, 2020 to April 20, 2022.
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Teaching Experience: [8 years]

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1. *Lecturer*, Department of Physics, St. Xavier's College, Dumka, Jharkhand. June 12, 2012 to June 11, 2014.
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2. *Assistant Professor*, Department of Physics, Guru Gobind Singh Educational Society's Technical Campus, Bokaro, Jharkhand, India, September 05, 2014 to July 30, 2016.
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3. *Lecturer*, Department of Physics, Cambridge Institute of Polytechnic, Ranchi, Jharkhand, India, August 01, 2016 to April 10, 2017.
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4. *Assistant Professor*, G H Rasoni University, Amravati, Maharashtra, India, December 19, 2022 to September 20, 2023.
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5. *Assistant Professor*, School of Basic and Applied Sciences, Raffles University, Neemrana, Rajasthan -301705, India, September 27, 2023 to May 30, 2025.
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Subjects Taught at UG/PG Level:

<i>Mechanics</i>	<i>Electrodynamics</i>
<i>Classical Mechanics</i>	<i>Solid state Physics</i>
<i>Thermodynamics and Statistical Mechanics</i>	<i>Relativistic Dynamics</i>
<i>Mathematical Physics</i>	<i>Engineering Physics</i>
<i>Optics & Modern Physics</i>	
<i>Quantum Mechanics & Quantum Physics</i>	
<i>Atomic, Molecular & Nuclear Physics</i>	
<i>Electricity & Magnetism</i>	

Area of specialization:

<i>Laser Speckle Imaging and applications</i>	<i>Biomedical Imaging and processing</i>
<i>Dynamic Speckle Imaging</i>	<i>Holography</i>
<i>Biospeckle imaging</i>	
<i>Optical Imaging & Image processing</i>	
<i>Photonics</i>	
<i>BioPhotonics</i>	

Research Interests:

<i>Dynamic Speckle and Biospeckle imaging and its biological & medical applications</i>	<i>Speckle imaging and Interferometry</i>
<i>Laser speckle Imaging (LSI),</i>	<i>Holography and Photonics</i>
<i>Biomedical Imaging</i>	
<i>Optical Image processing</i>	

Links (publications, citation metrics & peer reviews):

	Google Scholar	Scopus	Web of Science
Citations	500	354	261
h-index	13	12	10
i10-index	15		

GoogleScholar	: https://scholar.google.co.in/citations?user=wxGVWzAAAAAJ&hl=en
Publons	: https://publons.com/a/1285178
ResearchGate	: https://www.researchgate.net/profile/M_Z_Ansari
ORCID	: https://orcid.org/0000-0002-0112-238X
Web of Science ID	: https://www.webofscience.com/wos/author/rid/O-3225-2016
Scopus ID	: https://www.scopus.com/authid/detail.uri?authorId=55247008500
Loop ID	: http://loop.frontiersin.org/people/458508/overview?referrer=orcid_profile
Live DNA	: https://livedna.net/?dna=91.13516

Technical/Computer skills:

<i>Language known:</i>	C, C++
<i>Software applications:</i>	Matlab, Origin, MathType, Front Surfer & Lite Pipe for Matlab (OKO Technologies, the Netherlands), MS-Excel, MS-office,
<i>System known:</i>	Win 98, 2000, XP, Vista
<i>Laboratory skills:</i>	Shack-Hartmann wavefront sensor (OKO Technologies, the Netherlands), CCD camera (Pixelink, CMOS color camera), CCD camera (Basler, Germany), Linear stage (Newport), 2D-Galvoscaner, SLD (superlum, Russia), Dual channel function generator, Auto-Balanced photoreceiver (New focus, USA), Neutral Density Filter, He-Ne Laser (10 mW), Spatial filter, Powermeter

Profile:

Active researcher in the field of Dynamic Laser Speckle Imaging and Applications. Possess a flexible and detail oriented attitude. Good communication skills both in written and verbal. Possess a strong desire to achieve specified goals based on the qualification and experience.

Area of interest:

Interested in teaching, research and development in Science, Technology and Engineering. Objective is to utilize the knowledge, skill and good interpersonal relationships acquired in higher education sector for the betterment of family, peer groups, students, research Scholars, the establishment in which working and to the society at a larger level.

Awards/Distinctions Received:

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1. **Junior Research Fellow** D.S.T. Project [SR/S2/LOP-07/2005] from 29 July 2008 to 23 October 2011. Department of Applied Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad, India.

Project Title: High-resolution retinal imaging of living eye through Adaptive Optics.

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2. International Scientist Awards on Engineering, Science and Medicine/Best Researcher Award by **VDGOOD Professional Association**, India on 06 & 07-Feb-2021.
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3. Research Advisor, **Nan Yang Academy of Sciences**, Singapore on October 30, 2018.
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4. Academy Mentor by **Web of Science**
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5. *Member, Asian Council of Science Editors*
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List of Publications

Quartile - Q1 Journals [No. 01]

1. **Ansari, M. Z.**, Ramírez-Miquet, E. E., Otero, I., Rodríguez, D., & Darias, J. G. (2016). Real time and online dynamic speckle assessment of growing bacteria using the method of motion history image. *Journal of biomedical optics*, 21(6), 066006. DOI: [10.1117/1.JBO.21.6.066006](https://doi.org/10.1117/1.JBO.21.6.066006)

Quartile - Q2 Journals [No. 12]

2. **Ansari, M. Z.** (2025). Biospeckle PIV (Particle image velocimetry) guided live micro-insect monitoring and tracking. *Optik*, 172556. DOI: <https://doi.org/10.1016/j.ijleo.2025.172556>.

3. **Ansari, M. Z.** (2023). Employing optoelectronic laser speckle imaging to reveal molecular dynamics followed by the thermal expansion of liquid water. *Opt Quant Electron* 55, 877 (2023). DOI: [10.1007/s11082-023-05164-2](https://doi.org/10.1007/s11082-023-05164-2).

4. **Ansari, M. Z.**, & Mujeeb, A. (2019). Application of temporal correlation algorithm to interpret laser Doppler perfusion imaging. *Lasers Med Sci*, 34 (9):1929–1933. DOI: [10.1007/s10103-019-02811-7](https://doi.org/10.1007/s10103-019-02811-7)

5. **Ansari, M. Z.**, Kang, E. J., Manole, M. D., Dreier, J. P., & Humeau-Heurtier, A. (2017). Monitoring microvascular perfusion variations with laser speckle contrast imaging using a view-based temporal template method. *Microvascular research*, 111, 49-59. DOI: [10.1016/j.mvr.2016.12.004](https://doi.org/10.1016/j.mvr.2016.12.004)

(This work was supported by *NIH grant R01HD075760 (MDM)*)

6. **Ansari, M. Z.**, & Nirala, A. K. (2016). Biospeckle numerical assessment followed by speckle quality tests. *Optik-International Journal for Light and Electron Optics*, 127(15), 5825-5833. DOI: [10.1016/J.IJLEO.2016.04.010](https://doi.org/10.1016/J.IJLEO.2016.04.010)

7. **Ansari, M. Z.**, Cabrera, H., & Ramírez-Miquet, E. E. (2016). Imaging functional blood vessels by the laser speckle imaging (LSI) technique using Q-statistics of the generalized differences algorithm. *Microvascular research*, 107, 46-50. DOI: [10.1016/j.mvr.2016.04.012](https://doi.org/10.1016/j.mvr.2016.04.012)

8. **Ansari, M. Z.**, Humeau-Heurtier, A., Offenhauser, N., Dreier, J. P., & Nirala, A. K. (2016). Visualization of perfusion changes with laser speckle contrast imaging using the method of motion history image. *Microvascular research*, 107, 106-109. DOI: [10.1016/j.mvr.2016.06.003](https://doi.org/10.1016/j.mvr.2016.06.003)

9. **Ansari, M. Z.**, Grassi, H. C., Cabrera, H., Velásquez, A., & Andrades, E. D. (2016). Online fast Biospeckle monitoring of drug action in Trypanosoma cruzi parasites by motion history image. *Lasers in medical science*, 31(7), 1447-1454. DOI: [10.1007/s10103-016-2008-6](https://doi.org/10.1007/s10103-016-2008-6)

10. **Ansari, M. Z.**, & Nirala, A. K. (2015). Monitoring capillary blood flow using laser speckle contrast analysis with spatial and temporal statistics. *Optik-International Journal for Light and Electron Optics*, 126(24), 5224-5229. DOI: [10.1016/j.ijleo.2015.09.200](https://doi.org/10.1016/j.ijleo.2015.09.200)

11. **Ansari, M. Z.**, & Nirala, A. K. (2013). Biospeckle activity measurement of Indian fruits using the methods of cross-correlation and inertia moments. *Optik-International Journal for Light and Electron Optics*, 124(15), 2180-2186. DOI: [10.1016/j.ijleo.2012.06.081](https://doi.org/10.1016/j.ijleo.2012.06.081)
12. **Ansari, M. Z.**, & Nirala, A. K. (2013). Assessment of bio-activity using the methods of inertia moment and absolute value of the differences. *Optik-International Journal for Light and Electron Optics*, 124(6), 512-516. DOI: [10.1016/j.ijleo.2011.12.013](https://doi.org/10.1016/j.ijleo.2011.12.013)
13. **Ansari, M. Z.**, & Nirala, A. K. (2016). Following the drying process of Fevicol (adhesive) by dynamic speckle measurement. *Journal of Optics*, 45(4), 357-363. DOI: [10.1007/s12596-015-0298-x](https://doi.org/10.1007/s12596-015-0298-x)

Quartile - Q3 Journals [No. 17]

14. **Ansari, M. Z.** (2025) Evaluation of biological activity via biospeckle laser imaging. *Biophysics Reports*. DOI: [10.52601/bpr.2025.250010](https://doi.org/10.52601/bpr.2025.250010)
15. **Ansari, M. Z.** (2024). Online fast assessment of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) proliferation through replication. *Biophysical Reviews and Letters (Special Issue on Machine Learning and Computational Tools for Medical Image Analysis)*, 19(4), 313–327. DOI: [10.1142/S1793048024400034](https://doi.org/10.1142/S1793048024400034)
16. **Ansari, M. Z.**, & Mujeeb, A. (2018). Assessment of microscopic repair dynamics in self-healing polymer by modeling laser speckle images. *Laser Physics*, 28(12), 126003. DOI: [10.1088/1555-6611/aae193](https://doi.org/10.1088/1555-6611/aae193)
17. Rethesh, R., Thomas, D., **Ansari, M. Z.**, Varghese, B., Radhakrishnan, P., & Mujeeb, A. (2018). Application of laser biospeckle technique for the analysis of artificially introduced local dynamics in apple fruit. *Laser Physics*, 28(11), 115601. DOI: [10.1088/1555-6611/aad92d](https://doi.org/10.1088/1555-6611/aad92d)
18. **Ansari, M. Z.**, & Mujeeb, A. (2018). Modeling of laser speckles of heterogeneous dynamics in drying and aging paint dispersions using a view-based temporal template method. *Laser Physics*, 28(8), 085603. DOI: [10.1088/1555-6611/aabed4](https://doi.org/10.1088/1555-6611/aabed4)
19. **Ansari, M. Z.**, Mujeeb, A., & Nirala, A. K. (2018). Assessment of biological leaf tissue using biospeckle laser imaging technique. *Laser Physics*, 28(6), 065608. DOI: [10.1088/1555-6611/aab65c](https://doi.org/10.1088/1555-6611/aab65c)
20. Rethesh, R., **Ansari, M. Z.**, Radhakrishnan, P., & Mujeeb, A. (2018). Application of qualitative biospeckle methods for the identification of scar region in a green orange. *Modern Physics Letters B*, 32(09), 1850113. DOI: [10.1142/S0217984918501130](https://doi.org/10.1142/S0217984918501130)
21. Samuel, B., Rethesh, R., **Ansari, M. Z.**, Nampoori, V. P. N., Radhakrishnan, P., & Mujeeb, A. (2017). Cross-correlation and time history analysis of laser dynamic specklegram imaging for quality evaluation and assessment of certain seasonal fruits and vegetables. *Laser Physics*, 27(10), 105601. DOI: [10.1088/1555-6611/aa8283](https://doi.org/10.1088/1555-6611/aa8283)
22. **Ansari, M. Z.**, Grassi, H. C., Cabrera, H., & Andrades, E. D. J. (2016). Real time monitoring of drug action on T. cruzi parasites using a biospeckle laser method. *Laser Physics*, 26(6), 065603. DOI: [10.1088/1054-660X/26/6/065603](https://doi.org/10.1088/1054-660X/26/6/065603)
23. **Ansari, M. Z.**, Da Silva, L. C., Da Silva, J. V. P., & Deana, A. M. (2016). Modelling laser speckle photographs of decayed teeth by applying a digital image information technique. *Laser Physics*, 26(9), 095602. DOI: [10.1088/1054-660X/26/9/095602](https://doi.org/10.1088/1054-660X/26/9/095602)

24. **Ansari, M. Z.**, & Nirala, A. K. (2015). Biospeckle assessment of torn plant leaf tissue and automated computation of leaf vein density (LVD). *The European Physical Journal Applied Physics*, 70(2), 21201. DOI: [10.1051/epjap/2015150013](https://doi.org/10.1051/epjap/2015150013)
25. Minz, P. D., **Ansari, M. Z.**, & Nirala, A. K. (2015). Effect of antibrowning agents on fresh-cut potato tubers using frequency filtering of biospeckle images. *Laser Physics*, 25(5), 055601. DOI: [10.1088/1054-660X/25/5/055601](https://doi.org/10.1088/1054-660X/25/5/055601)
26. **Ansari, M. Z.**, & Nirala, A. K. (2016). Assessment of biospeckle activity of lemon fruit. *Agricultural Engineering International: CIGR Journal*, 18(2), 190-200.
27. **Ansari, M. Z.**, & Nirala, A. K. (2014). Assessment of fruits during shelf-life storage using biospeckle laser. *Agricultural Engineering International: CIGR Journal*, 16(3), 223-229.
28. Priyanka, **Ansari M Z** , & Rajpal. (2023). Impact Of Planetary Waves On Extreme Weather Events: A Statistical Analysis. *Revista Electronica De Veterinaria*, 24(4), 487 - 491. <https://doi.org/10.69980/redvet.v24i4.1282>
29. Sangeeta, **Ansari, M. Z**, Rajpal. (2023). Exploring The Evolutionary History Of Lunar Maria: Insights Into Ancient Volcanic Activity And Impact Processes. *Revista Electronica De Veterinaria*, 24(4), 480 - 486. <https://doi.org/10.69980/redvet.v24i4.1280>

Quartile - Q4 Journals [No. 04]

30. Priyanka, **Ansari, M. Z**, Rajpal. (2023). Coupling Mechanisms Between Lower And Upper Atmosphere Through Planetary Wave Coherence: Correlation Studies. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), 2080–2089. <https://doi.org/10.53555/jrtdd.v6i9s.3270>
31. Sangeeta, **Ansari, M. Z**, Rajpal. (2023). Understanding Lunar Regolith: Implications For Geological History And Future Exploration. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), 2074–2079. <https://doi.org/10.53555/jrtdd.v6i9s.3269>
32. **Ansari, M. Z.**, & Mujeeb, A. (2017). Application of motion history image (MHI) on dynamic fluorescent imaging for monitoring cerebral ischemia induced by occlusion of middle cerebral artery (MCA) in mouse brain. *Biomedical Spectroscopy and Imaging*, 6(3-4), 135-142. DOI: [10.3233/BSI-170170](https://doi.org/10.3233/BSI-170170)
33. **Ansari, M. Z.**, & Nirala, A. K. (2015). Assessment of Fevicol (adhesive) drying process through dynamic speckle techniques. *AIMS Bioeng*, 2(2), 49-59. DOI: [10.3934/bioeng.2015.2.49](https://doi.org/10.3934/bioeng.2015.2.49)

Publications (other Peer reviewed and indexed journals) [No. 02]

34. **Ansari, M. Z.**, & Nirala, A. K. (2015). Quantification of drying of white versatile glue (fevicol) via dynamic speckle measurement. *Journal of Applied Physical Science International*, 4(3), 152-159.
35. **Ansari, M. Z.**, & Mujeeb, A. (2019). Interpreting Blood Perfusion Variations in Laser Doppler Imaging. *EC Cardiology* 6.7: 621- 625.

Communicated to journals [No. 03]

1. **Ansari, M. Z. & M. H Ansari** (2024). Spatio-temporal correlation analysis as a tool to evaluate SARS CoV-2 proliferation through replication. *Physica Scripta (IOP)*.

Publication (international conference proceeding) [No. 06]

1. **Ansari M. Z.**, Grassi H. C., Cabrera H., Velásquez A., Andrades Efrén D. J., & Mujeeb. A. (2021). Application of Biospeckle Laser Method for Drug Testing on Parasites: *Advanced Studies in Experimental and Clinical Medicine: Modern Trends and Latest Approaches* (1st ed.). Apple Academic Press (CRC Press, Taylor & Francis Group). eBook ISBN: 9781003057451. DOI: <https://doi.org/10.1201/9781003057451-11>
2. **Ansari, M. Z.**, & Nirala, A. K.. (2012). “Biospeckle Techniques in Quality Evaluation of Indian Fruits.” *World Academy of Science, Engineering and Technology*, International Journal of Biological, Biomolecular, Agricultural, Food and Biotechnological Engineering 6: 978-982. DOI: [10.5281/zenodo.1327706](https://doi.org/10.5281/zenodo.1327706)
3. **Ansari, M. Z.**, Minz, P. D., & Nirala, A. K. (2012, March). Fruit quality evaluation using biospeckle techniques. In *2012 1st International Conference on Recent Advances in Information Technology (RAIT)* (pp. 873-876). IEEE. DOI: [10.1109/RAIT.2012.6194540](https://doi.org/10.1109/RAIT.2012.6194540)
4. Dinesh Kumar and **M. Z. Ansari.**, (2023), Feasibility study of pumped hydro storage projects: A review. In first International Conference on Innovative Advancements in Basic & Applied Sciences (INCIABAS 1.0) held on November, 2-4, 2023, organized by School of Basic & Applied Sciences, Raffles University, Neemrana, Rajasthan.
5. **M. Z. Ansari** and Jyoti., (2023), Assesment of low temperature thermal exchange between the system and surroundings using speckle imaging. In first International Conference on Innovative Advancements in Basic & Applied Sciences (INCIABAS 1.0) held on November, 2-4, 2023, organized by School of Basic & Applied Sciences, Raffles University, Neemrana, Rajasthan.
6. **M. Z. Ansari** and Pramila Yadav., (2024), Laser speckle imaging reveals low temperature thermal exchange between the system and surroundings. In International Conference on Recent Developments in Humanities, Business, Enviroment & Social Science (ICRDHBESS-2024) held on October, 12-13, 2024, organized by G.A.V. Degree College, Patauda, Jhajjar, Haryana, India in Association with Research Plateau Publishers, Haryana, India.

Publication (national conference proceeding)[No. 02]

1. **Ansari, M. Z.**, & Nirala, A. K. (2011). Quality evaluation of Tomato and Apple during their shelf lives using non-destructive biospeckle correlation technique”, Published in the proceedings of National Seminar on Nonomaterials and Their Applications NANOMAT2011, Allied Publishers, Pvt. & Ltd., vol-1, pp. 158-164, Feb 10-11, 2011 held in Indian School of Mines, Dhanbad, India.
2. **Ansari, M. Z.**, Minz P D & Nirala A K. (2011). Spatial-temporal speckle correlation technique for fruit quality evaluation during shelf life”, Published in the proceedings of National Conference on Frontiers in Electronics Communication and Instrumentation Technology FECIT 2011, pp. 28-29, Nov 3-4, 2011, ISM, Dhanbad, India.

Edited Books [03]:

1. **Ansari, M. Z et. al.** (2024) *Futuristic Trends in Physical Sciences. e-ISBN: 978-93-5747-671-3.* Volume 3, Book 4, **IIP Series, Iterative International Publishers, India.**

2. Kaddam L, **Zaheer M.** (2017). ISBN: 978-81-935757-8-9. Vol. 1, *Studies on Components of Blood & their Functions*. **Open Access eBooks, USA.**
3. Veeramanipriya. E, Mishra S. P, **Ansari, M. Z et. al.** (2025) *Frontiers in Physics: Theory, Experiments, and Applications – Volume 6 2026, IIP Series, Iterative International Publishers, India .*

Books published [01]:

1. **Ansari, M. Z.** (2025). *Thermodynamics. A brief introduction*. ISBN: 978-620-7-46829-4. **Lambert Academic publishing, United Kingdom.**

Chapters in edited book:

1. **Ansari, M. Z.,** & Nirala, A. K. (2021). Laser Speckle Imaging Reveals Drying Dynamics of Adhesive. *Newest Updates in Physical Science Research* Vol. 7, 77–87. **B P International.** eBook ISBN 978-93-91215-65-1. DOI: <https://doi.org/10.9734/bpi/nupsr/v7/1513E>

Invited Talk in Conference / Seminar / Workshop [02]:

1. **Ansari M. Z.,** Grassi H. C., Cabrera H., Velásquez A., Andrades Efrén D. J., & Mujeeb. A. (2017). INVITED TALK on “Application of Biospeckle Laser Method for Drug Testing on Parasites” in *Euro-India International Conference on Experimental and Clinical Medicine (ICECM-2017)* organized by **International and Inter University Centre for Nanoscience and Nanotechnology (IIUCNN), Mahatma Gandhi University, Kerala, India & Institute for Holistic Medical Sciences (IHMS), Kottayam, Kerala, India & Ayurveda und Venen Praxis Dr. MATHEW, St. Primus Weg 68, A-9020 Klagenfurt am Wörthersee, Austria** on 10-12 November, 2017, Kottayam, Kerala, India.
2. **Ansari M. Z.** (2024) INVITED TALK on “*Biomedical Applications of Laser Speckle Imaging*” in the Workshop on Laser Speckle Metrology, organized by *International School of Photonics, Cochin University of Science & Technology, Kerala* from 22-23 Feb.

Workshop/conference/webinar attended [05]:

1. *11th Annual Conference of the Asian Council of Science Editors (ACSE), held on 25–26 February 2025, Deira Dubai, UAE.*
2. *Live online webinar on "Enhancing Peer Review: How Reviewer Credits Supports Editors and Elevates the Process" held on March 8, 2025 organized by Asian Council of Science Editors (ACSE).*
3. *International Conference on Innovative Advancements in Basic & Applied Sciences (INCIABAS 1.0)* organized by **School of Basic & Applied Sciences, Raffles University, Neemrana, Rajasthan,** November, 2-4, 2023.
4. *National Photonics Symposium (NPS) - 2018* organized by **International School of Photonics, Cochin University of Science and Technology, Kochi,** from 27 February – 1 March 2018.
3. *Euro-India International Conference on Experimental and Clinical Medicine (ICECM-2017)* organized by **International and Inter University Centre for Nanoscience and Nanotechnology (IIUCNN), Mahatma Gandhi University, Kerala, India & Institute for Holistic Medical Sciences (IHMS), Kottayam, Kerala, India & Ayurveda und Venen Praxis Dr. MATHEW, St. Primus**

Weg 68, A-9020 Klagenfurt am Wörthersee, Austria on 10-12 November, 2017 Kottayam, Kerala, India.

4. *National Seminar on Nonomaterials and Their Applications NANOMAT 2011*, organized by **Department of Applied physics, Indian School of Mines, Dhanbad**, India. Feb 10-11, 2011.

5. *Symposium on Engineering Applications of MATLAB* organized by **Mineral Engineering Society, Indian School of Mines, Dhanbad**, January 9 - 17, 2010.

Professional society/Conference/Webinar member committees:

- *Member, Asian Council of Science Editors* (Membership No. 242615934) dated 29 October, 2024.
- *Organizing Committee Member, Global Summit on Lasers, Optics and Photonics, OPTICS2026*, happening from April 23-25, 2026, in Frankfurt, **Germany**.
- *Member, Advisory Council of World Congress on Cardiac Sciences–2018*, International Conference on Cardiology, November 28 – 29, 2018 held at **Indian Institute of Science, Bangalore, India**.
- *Member, Advisory Board and Faculty of 3rd World Congress on Cardiac Sciences - 2022 Virtual International Conference on Cardiology*, held on 30th January 2022, by **BioGenesis Health Cluster, Bangalore, at Indian Institute of Science, Bengaluru, India**.
- *Research Advisor, Nan Yang Academy of Sciences, Singapore* (Certificate No.: 230-5-048)
- *Co-convener, International Conference on Innovative Advancements in Basic & Applied Sciences (INCIABAS 1.0)* held on November, 2-4, 2023, organized by **School of Basic & Applied Sciences, Raffles University, Neemrana, Rajasthan**.
- *Member, Technical program committee in 8th International Conference on Optics, Photonics and Lasers (OPAL' 2025)*, held on 14-16 May 2025, Rhodes, Greece.
- *Member, Technical program committee in International Conference on Geoscience, Remote Sensing and Optics Technology (GRSOT 2024)* held on Beijing, China, from 17–18 September 2024.
- *Member, Technical program committee in International Conference on Optical Communication and Computer Engineering (ICOCCE 2024)*, held on June 22–23, 2024, Beijing, China.
- *Member, Technical program committee in International Conference on Automation Engineering and Artificial Intelligence (ICAEAI 2024)* held on September 21–22, 2024. ICAEAI 2024, Shanghai, China.
- *Member, Technical program committee in International Conference on Applied Optics and Computer Engineering (AOCE 2023)* held on November 18-19, 2023 organized by **Huazhong University of Science and Technology, China**.
- *Member, Scientific Committee in the Global Webinar on Neuroscience and Brain Disorder - 2023*, held on September 19-20, 2023 as a **Live online event, India**.
- *Member, Scientific Committee in the global conference on Public Health and Healthcare Management - 2024*, held on June 17-19, 2024 at Rome, Italy.
- *Member, Scientific Committee in the Global Webinar on Neuroscience and Brain Disorder - 2023* held on September 19-20, 2023 as a **Live online event, India**.

- *Member, Scientific Committee in the global Summit on Nursing Science and Healthcare GSNURSING - 2024 , held on December 02-04, 2024 at Rome, Italy.*
- *Member, Technical Program Committee of The 5th Annual International Conference on Data Science and Business Analytics (ICDSBA2021), held on September 24-26, 2021, Changsha, China. "Technical Program Committee," 2021 5th Annual International Conference on Data Science and Business Analytics (ICDSBA), 2021, pp. 22-23, doi: [10.1109/ICDSBA53075.2021.00008](https://doi.org/10.1109/ICDSBA53075.2021.00008).*
- *Member, Advisory Committee of International Conference on Nutraceuticals, Herbs Supplements and Nano Formulations (ICNH-2019) September 13-15, 2019, Kottayam, Kerala, India.*
- *Franklin Membership, London Journals Press (UK) (Membership ID#SH23657)*

Editorial Board membership:

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- *Regular Reviewer, The Journal of Medical Research (JMR) (Online ISSN: 2395-7565) Wolters Kluwer –Medknow.*
 - *Regular Reviewer, Sahand Communications in Mathematical Analysis (SCMA) (Online ISSN: 2423-3900).*
 - *Serving as section Editor for the section collection “Imaging and Radiation Research” (ISSN: 2578-1618) EnPress publisher.*
 - *Editor, book series titled “Futuristic Trends in Physical Sciences” (Volume 3 2023) under Iterative International Publisher (IIP), India.*
 - *Member, Editorial board, Advances in Theoretical & Computational Physics(ATCP) (ISSN: 2639-0108) opast publishers.*
 - *Editor, eBook (ISBN: 978-81-935757-8-9) titled “Studies on Components of Blood & their Functions" Open Access eBooks, USA.*
 - *Member, Editorial board, International Journal of Swarm Intelligence and Evolutionary Computation, Walsh Medical Media (WMM), UK*
 - *Member, Editorial board, International journal of Statistical Analysis (ISSN 2690-2265)*
 - *Member, Editorial board, Journal of Blood Research (iMedPub Journals)*
 - *Member, Editorial board, Artificial Intelligence in Medical Imaging (AIMI, Artif Intell Med Imaging)*
 - *Member, Editorial board, EC Agriculture (publisher: ECronicon Open Access)*
 - *Member, Editorial board, International Journal of Drug Research and Technology (Open Access)*
 - *Member, Editorial board, Biosensors and Bioelectronics Open Access (Gavin Publishers international open access)*
 - *Member, Editorial board, Current Updates in Stroke (open access and open peer review journal - publisher: OPR Science)*
 - *Member, Editorial board, International Journal of Medicine and Clinical Research (IJMCR) (Acta Scientifica open access)*
 - *Member, Editorial board, Journal of Neurology Forecast (open access)*
 - *Member, Editorial board, SM Pharmacology and Pharmaceutics Journal (international Peer Reviewed Open Access, SM Online Scientific Resources LLC, USA)*

- Member, Editorial board, *SM Journal of Brain Research & Therapy* (SM Online Scientific Resources LLC, USA)
- Member, Editorial board, *EC Neurology* (publisher: ECronicon Open Access)
- Member, Editorial board, *EC Cardiology* (publisher: ECronicon Open Access)
- Member, Editorial board, *Neuroscience and Neurological Surgery* (Auctores Publishing LLC, USA)
- Member, Editorial board, *Journal of Thrombosis and Circulation: Open Access*
- Member, Editorial board, *Nanomedicine & Nanotechnology Open Access (NNOA)*, MedWin Publishers
- Member, Editorial board, *Acta Scientific Medical Sciences (ASMS)*, Acta Scientific Publications Private Limited
- Member, REPRISE Italian Ministry of Education, Universities and Research (MIUR) (<https://reprise.cineca.it/en>)
- Member, Editorial board, *Journal of Systems Biology and Proteome Research* (Allied Academies)
- Member, Editorial board, *Open Access Journal of Dental Sciences (OAJDS)*, MedWin Publishers
- Member, Editorial board, *Nanomedicine & Nanotechnology Open Access (NNOA)*, MedWin Publishers
- Member, Editorial board, *Current Scientific Research in Biomedical Sciences*, Chembio Publishers
- Member, Editorial board, *Open Access Journal of Ophthalmology (OAJO)*, MedWin Publishers
- Member, Editorial board, *Phab Linx Journal of Neurology and Neurosciences*, Phab Linx Publishing Group LLC, USA

Web of Science verified peer Reviews [No. 130]:

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| ● <i>Scientific Reports</i> (Springer Nature) (3) | ● <i>Scientia Horticulturae</i> (Elsevier) (5) |
| ● <i>Applied Optics</i> (Optical Society of America) (3) | ● <i>Biomedical Engineering</i> (World Scientific) (1) |
| ● <i>Journal of Optics</i> (Institute of Physics) (13) | ● <i>Physical Biology</i> (Institute of Physics, IOP Science) (1) |
| ● <i>Journal of Applied Physics</i> (American Institute of Physics(AIP)) (11) | ● <i>Engineering research express</i> . (Institute of Physics, IOP Science) (2) |
| ● <i>Journal of Biomedical Optics</i> (SPIE) (3) | ● <i>Journal of Visualized Experiments</i> (JoVE) (1) |
| ● <i>Optics Communications</i> (Elsevier) (1) | ● <i>Critical Reviews in Food Science and Nutrition</i> , (Taylor & Francis Online) (2) |
| ● <i>Postharvest Biology and Technology</i> (Elsevier) (1) | ● <i>Biomedical Spectroscopy and Imaging</i> (IOS Press) (2) |
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| ● <i>Optics and Lasers in Engineering</i> (Elsevier) (7) | ● <i>Journal of Optics and Photonics Research</i> (02) |
| ● <i>Journal of physics D: Applied Physics</i> (Institute of Physics) (2) | ● <i>Current Science</i> , Indian Academy of Sciences |
| ● <i>Physica Scripta</i> (Institute of Physics) (6) | |
| ● <i>Lasers in Medical Science</i> (Springer) (30) | |
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- *Optik – International Journal for Light and Electron Optics (Elsevier) (2)*
 - *Journal of Innovative Optical Health Sciences (JIOHS) (World Scientific) (3)*
 - *Biomedical Physics & Engineering Express (Institute of Physics, IOP Science) (2)*
 - *Biomedical Engineering: applications, basis and communications (World Scientific) (2)*
 - *Biomedical engineering (Springer) (2)*
 - *Computers and Electronics in Agriculture (Elsevier) (2)*
 - *Computers in Biology and Medicine (Elsevier) (4)*
 - *Recent Patents on Drug Delivery & Formulation, Bentham Science Publishers (1)*
 - *African Journal of Agricultural Research, Open Access Journals-Academic journals (2)*
 - *Academia Letters (1)*
 - *Open Journal of Clinical and Medical Case Reports (1)*
 - *EC Neurology (1)*
 - *Open Journal of Clinical and Medical Case Reports (1)*
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