Dr. Md Zaheer Ansari

Email:mohamedzaheer1@gmail.com,
dr.zaheeransari@rafflesuniversity.edu.in

Website:https://rafflesuniversity.edu.in/faculty-science

Assistant Professor

Department of Physics
School of Basic and Applied Sciences,
Raffles University,
Neemrana,
Rajasthan -301705, India.
Phone: +91-7295869294 / 8592943189

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: [10.5 yrs]

Post Doctoral Experience: [4.5 yrs]

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

Teaching Experience: [6 yrs]

1. *Assistant Professor*, School of Basic and Applied Sciences, Raffles University, Neemrana, Rajasthan -301705, India, September 27, 2023 to till date **[1.5 years].**
2. *Assistant Professor*, G H Raisoni University, Amravati, Maharashtra, India, December 19, 2022 to May 20, 2023 **[6 months].**
3. *Assistant Professor*, Techno Institute of Higher Studies, Lucknow, India, October 11, 2022 to December 09, 2022 **[2 months].**
4. *Lecturer*, Department of Physics, Cambridge Institute of Polytechnic, Ranchi, Jharkhand, India, August 01, 2016 to April 10, 2017 **[8 months].**
5. *Lecturer*, Department of Physics, K K Group of Institutions, Dhanbad, Jharkhand, India, April 01, 2015 to July 28, 2017 **[4 months].**
6. *Assistant Professor*, Department of Physics, Guru Gobind Singh Educational Socity's Technical Campus, Bokaro, Jharkhand, India, September 05, 2014 to March 04, 2015 **[6 months].**
7. *Lecturer*, Department of Physics, St. Xavier's College, Dumka, Jharkhand. June 12, 2012 to June 11, 2014 **[2 years]**.

Subjects Taught at UG/PG Level:

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

Area of specialization:

Laser Speckle Imaging and applications	*Photonics*
Dynamic Speckle Imaging	*BioPhotonics*
Biospeckle imaging	*Biomedical Imaging and processing*
Optical Imaging & Image processing	*Holography*

Research Interests:

Dynamic Speckle and Biospeckle imaging and its	*Optical Image processing*
biological & medical applications	*Speckle imaging and Interferometry*
Laser speckle Imaging (LSI),	*Holography and Photonics*

Links (publications, citation metrics & peer reviews):

	Google Scholar	Web of Science	Scopus
Citations	458	250	333
h-index	13	10	11
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:

Language known: C, C++
Software applications: Matlab, Origin, MathType, Front Surfer & Lite Pipe for Matlab (OKO Technologies, the Netherlands), MS-Excel, MS-office,
System known: Win 98, 2000, XP, Vista
Laboratory skills: Shack-Hartmann wavefront sensor (OKO Technologies, the Netherlands), CCD camera (Pixelink, CMOS color camera), CCD camera (Basler, Germany), Linear stage (Newport), 2D-Galvoscanner, 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:

1. **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.

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

Theses (Ph.D.) Supervision:

S. No.	Name of Research Scholar	Year of Completion	Title of Theses	Co-guides (if any)
1.	Priyanka	On-going	Study of the role of planetary waves in Coupling lower atmosphere and upper atmosphere	Nil
2.	Sangeeta	On-going	Study of the role of meteor Impacts on mineralogical diversity on lunar surface	Nil
3.	Pramila Yadav	On-going	Biospeckle Optical Imaging Technique and its Applications	Nil
4.	Ranu	On-going	Laser speckle imaging and its applications	Nil

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

Quartile - Q2 Journals [No. 11]

2. **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

3. **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

4. **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
(This work was supported by ***NIH grant R01HD075760 (MDM)***)

5. **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

6. **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

7. **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

8. **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

9. **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

10. **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

11. **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

12. **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

Quartile - Q3 Journals [No. 16]

13. **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

14. Retheesh, 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

15. **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

16. **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

17. Retheesh, 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

18. Samuel, B., Retheesh, 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

19. **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

20. **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

21. **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

22. 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

23. **Ansari, M. Z**., & Nirala, A. K. (2016). Assessment of biospeckle activity of lemon fruit. *Agricultural Engineering International: CIGR Journal*, *18*(2), 190-200.

24. **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.

25. **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

26. **Ansari, M. Z.** (2024). Spatio-temporal correlation analysis as a tool to evaluate SARS CoV-2 proliferation through replication. *Laser physics* (communicated).

27. 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

28. 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]

29. 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

30. 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

31. **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

32. **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

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

33. **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.

34. **Ansari, M. Z**., & Mujeeb, A. (2019). Interpreting Blood Perfusion Variations in Laser Doppler Imaging. *EC Cardiology* 6.7: 621- 625.

Publication (international conference proceeding) [No. 06]

35. **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

36. **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

37. **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

38. 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.

39. **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.

40. **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]

41. **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.

42. **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.

Chapters in edited book:

43. **Ansari, M. Z**., & Nirala, A. K. (2021). Laser Speckle Imaging Revels 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

Books published:

44. **Ansari, M. Z**. (2021). *Thermodynamics and thermal physics: A brief analysis* (1st ed.) Notion Press, India (published on 2021-11-26). Paperback Book ISBN: 979-8885211949. Link: https://notionpress.com/read/thermodynamics-and-thermal-physics-a-brief-analysis

Edited Books:

45. Kaddam L, **Zaheer** M. (2017). ISBN: 978-81-935757-8-9. Vol. 1, *Studies on Components of Blood & their Functions*. Open Access eBooks, USA.

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

Invited Talk in Conference / Seminar / Workshop:

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 attended:

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

3. *National Photonics Symposium (NPS) - 2018* organized by **International School of Photonics, Cochin University of Science and Technology, Kochi**, from 27 February – 1 March 2018.

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. *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.

Professional society/Conference/Webinar member committees:

- *Member, **Asian Council of Science Editors*** (Membership No. 242615934) dated 29 October, 2024.
- *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, to be 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),** to be 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.*

- *Member, Advisory Committee of* ***International Conference on Nutraceuticals, Herbals 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:

- *Regular Reviewer,* ***The Journal of Medical Research*** *(JMR) (Online ISSN: 2395-7565) Published by 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.*
- *Serving as Editor for the book series titled "****Futuristic Trends in Physical Sciences****" (Volume 3 2023) under Iterative International Publisher (IIP), India.*
- *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. 125]:

- *Scientific Reports (Springer Nature) (2)*
- *Applied Optics (Optical Society of America) (3)*
- *Journal of Optics (Institute of Physics) (13)*
- *Journal of Applied Physics (American Institute of Physics(AIP)) (10)*
- *Journal of Biomedical Optics (SPIE) (3)*
- *Optics Communications (Elsevier) (1)*
- *Postharvest Biology and Technology (Elsevier) (1)*
- *Optics and Laser Technology (Elsevier) (3)*
- *Optics and Lasers in Engineering (Elsevier) (7)*
- *Journal of physics D: Applied Physics (Institute of Physics) (2)*
- *Physica Scripta (Institute of Physics) (6)*
- *Lasers in Medical Science (Springer) (29)*
- *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)*
- *Scientia Horticulturae (Elsevier) (5)*
- *Biomedical Engineering (World Scientific) (1)*
- *Physical Biology (Institute of Physics, IOP Science) (1)*
- *Engineering research express. (Institute of Physics, IOP Science) (2)*
- *Journal of Visualized Experiments (JoVE) (1)*
- *Critical Reviews in Food Science and Nutrition, (Taylor & Francis Online) (2)*
- *Biomedical Spectroscopy and Imaging (IOS Press) (2)*
- *Agricultural Engineering International: E-journal - CIGR. (8)*
- *Current Science, Indian Academy of Sciences (2)*
- *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)*

References :

1. **Prof. (Dr) A Mujeeb** Senior Professor International School of Photonics, Cochin University of Science and Technology, Kerala Email: mujeeb@cusat.ac.in, mujeebpoovar@gmail.com Phone : +91-484-2862717	2. **Prof. (Dr.) M. Kailasnath** Professor International School of Photonics, Cochin University of Science and Technology, Kerala Email: kailas@cusat.ac.in, mkailasnath@gmail.com Phone : +91-484-2575848	3. **Mr. Muhammad Rishad KP** Assistant Professor International School of Photonics, Cochin University of Science and Technology, Kerala Email: kpmrishad@cusat.ac.in Phone : +91-484-2575848