

Academic and Administrative Positions:

1. Professor & Head, IKS (Indian Knowledge Systems)

- Since **April 02, 2025**

2. Dean, School of Sciences

- Since **May 15, 2024**

3. Dean, Corporate & International Relations

- Since **December 2022**

4. Professor & Head, Applied Science

- Since **2009**

5. Associate Professor, Applied Science

Since 13 October 2003 to 13 October 2009

6. Assistant Professor

Since September 1991 to 2003

Teaching/Training Experience: 34 Years

Presently working as Dean (School of Sciences), Dean (Corporate & International Relations, since December 2022), & Professor & Head in the Department of Applied Sciences, Professor & Head (IKS) National Institute of Technical Teacher's Training and Research, Shamla Hills, Bhopal, under the Ministry of Education, GOI.

- **Twenty-two** years teaching/training experience of technical teachers as an Associate Professor (**from Oct 2003 to Oct 2009**) and Professor and Head (**from Oct 2009 to till date**).
- **Eleven years** teaching experience of graduate & post-graduate classes as an Assistant Professor in the Department of Physics & Electronics, S.V. P.G. Govt. aided College Bairagarh, Bhopal (September 1992 to October 2003).
- **One year** teaching experience of graduate & post-graduate classes as an Assistant Professor in the Department of Physics & Electronics at Govt. P.G. College Sehore (September 1991 to September 1992).

SCIENTIFIC RECOGNITION

- **Participated as a Senior Scientist in Indian Antarctic Scientific Expedition (2002).**
- Associated with National/International research projects awarded by DST/DOD/UGC GOVT of India.
- Reviewer of various International/National Journals including Elsevier Journals

- Presented many research papers in various International conferences in different countries.
- Awarded by travel grant award by SCAR (Scientific committee on Antarctic Research) for attending SCAR meeting on 17-19 June 2019 at the Skyway Mont Blanc in Courmayeur, Italy to present paper in Astronomy & Astrophysics from Antarctica (AAA).
- Attended and delivered Conference chair talk in International E-Conference on Synthesis, Characterization & Applications of Emerging Materials with special reference to Sustainable Technologies organized by Jabalpur Engineering college sponsored by TEQIP and supported by Springer during 22/02/2021 to 24/02/2021

International Visits (Contributed Talks): 17

Antarctica, South Africa, Boston (USA), London (U.K.), Frankfurt (Germany), Paris, Brisbane (Australia), Kyoto (Japan), Singapore, Mauritius, Malaysia, Moscow (Russia) , Tokyo (Japan), Bandung(Indonesia), Orford, Montreal, Canada, **Istanbul, Turkey**

- 1 **Antarctica** to conduct **Space Weather Research** from October 2001 to March 2002, **sponsored by GOI**.
- 2 **Cape town (South Africa)** for research work in **Plasma Research Institute** September 2002.
- 3 **Mauritius** for presenting research paper in **International Congress on Environmental Research (ICER-10)** held at University of Mauritius, Reduit, Mauritius from 16-18 September2010.
- 4 **Malaysia** for presenting research paper in **International Conference on Space Science and Communication (Icon Space 2011)** held in Penang, Malaysia during 12-13 July 2011.
- 5 **Paris (France)** for presenting research paper in **International Conference on Applied Physics** held at Paris 14-16 Nov 2011.
- 6 **Brisbane (Australia)** for presenting research paper in **International Seminar AOGS 2013** from 23 -26 June 2013.
- 7 **Singapore** for research work in **Singapore Earth Observatory** in 2013.
- 8 **Boston, Massachusetts, USA** for presenting research paper in **XXVI Conference on Computational Physics, CCP2014**, from August 10 to 14, 2014.
- 9 **Visited Frankfurt University of Applied Sciences Frankfurt, Germany** from 14- 19 August 2014.
- 10 **Visited London (U.K.) for presenting two research papers in** International conference Physics of Emergent Behaviour II held at Science Museum, London, UK from 9 – 10 July 2015,
- 11 **Visited Moscow (Russia) for presenting paper in International conference "All wave Astronomy. Shklovsky-100"**, held in Moscow from 20 to 22 June 2016 organized by Astro Space Center of P. N. Lebedev **Physical Institute and Space Research Institute of RAS and alos visited Moscow State University**
- 12 Visited Beijing, China for presenting research paper in **13th Annual Meeting and Geosciences World Community Exhibition**, 31 Jul to 05 Aug 2016.
- 13 Visited **Kyoto University Japan**, for presenting research paper in **International Conference World Data System Asia-Oceania Conference 2017 held at Kyoto University Japan**, during September 26-29, 2017.
- 14 Visited **National Institute of Polar Research (NIPR)** for presenting research paper in **The Eighth Symposium on Polar Science held at the National Institute of Polar Research (NIPR), Tokyo, Japan**, from 4 to 8 December 2017.

15 Delivered Contributed talk at **Space Science Centre, National Institute of Aeronautics and Space (LAPAN), Bandung**, Indonesia for presenting research paper in the 5th AOSWA Workshop held during 19/09/2018 to 21/09/ 2018.

16 Visited **Canton Orford, Qc, Montreal** for presenting research paper in **The Seventh International Space Climate Symposium** held at Hotel Estrimont Suites, **Canton Orford, Qc, Montreal** organized by **Department of Physics**, University of Montreal, QC, Canada Scheduled from 8 to 11 July 2019.

17 Visited **Istanbul, Turkey** for presenting research paper in prestigious International Conference **Mediterranean Geosciences Union (MedGU) at Istanbul Technical University** during 27-30 November 2023

LIST OF DOCTORAL THESIS SUPERVISION:

Ph.D. Awarded -17

- 1 **Bhupendra Malvi:** Diagnostic study of physical process affecting Sun-Earth environment using ground and space borne techniques, (*Awarded 2024*)
- 2 **Rafi Ahmead:** Investigation of Ionospheric response to high energetic solar transients using Ionosonde and GPS observations (*Awarded 2023*)
- 3 **Mahesh Parwani:** Investigation of short- and long-term Space Weather effects on Earth's Ionosphere by using Ground and Satellite based measurements (*Awarded 2022*)
- 4 **Shivangi Bhardwaj:** Geomagnetic and ionospheric response to solar eruptive phenomenon (*Awarded June 2019*)
- 5 **Roshni Atulkar:** Study of Ionospheric variability using Satellite and ground based observation (*Awarded July 2018*)
- 6 **Harleen Kaur:** Study and Investigation of the seismic impact on F2 region of the Ionosphere (*Awarded Nov 2017*)
- 7 **Rajesh Sharma:** A study on hydrometeorological for severe drought monitoring system using data mining technique (*Awarded May 2017*)
- 8 **Azad Ahmad Mansoori:** Investigation of Global Positioning System (GPS) performances under the influence of Ionosphere (*Awarded May 2015*)
- 9 **Mrs. Richa Khandelwal:** Performance and Analysis of Lattice Vector Quantization (*Awarded March 2015*)
- 10 **Sharad Chandra Tripathi:** Space Weather: The Sun and Earth perspective – event and their Geoeffective (*Awarded February 2015*)
- 11 **Purushottam Bhawre:** Study of space weather impact on polar ionosphere and its coupling with the low latitudinal ionosphere (*Awarded October 2013*)
- 12 **Parvaiz Ahmad Khan:** Space Weather: Effects of solar disturbances on the atmosphere of Earth and Mars (*Awarded June 2013*)
- 13 **Prakash Khatarkar:** Investigation of the Ionospheric Parameters by GPS receiver and digital Ionosonde (*Awarded May 2013*)
- 14 **Mili Trivedi:** Analysis of computational capacity of Ad-hoc network (*Awarded December 2011*)
- 15 **Shweta Mukherzee:** Study of Ionospheric Irregularities in the Crest of Equatorial Anomaly Region (*Awarded April 2011*)
- 16 **Soumi Bhattacharya:** Global Positioning System (GPS) Ionospheric Measurements: parameters and their Analysis (*Awarded 2010*)
- 17 **Rajesh Tiwari:** Study of Ionospheric effects on Satellite Communication and Navigation with the help of Global Positioning System (*Awarded 2010*)

THESIS EVALUATION: 25

RESEARCH PROJECTS UNDERTAKEN

International Project: 03

1. Space Weather Program at Antarctica

- **Sponsor:** National Centre for Antarctic and Ocean Research (NCAOR), Goa, Department of Ocean Development, Govt. of India
- **Project Code:** NCAOR / DOD / 9 / 11 (E) 2000
- **Duration:** 2006-2009
- **Role:** Co-PI

2. Coordinated Study of VLF Phenomenon at Antarctica

- **Sponsor:** Department of Ocean Development, Govt. of India
- **Duration:** 2002-2005
- **Role:** Co-PI

3. Latitudinal Studies of Ionospheric Scintillation and TEC Investigation

- **Focus:** Geomagnetic phenomena: storm, sub-storm, and micro pulsation using Indian and Russian data
- **Sponsor:** DST, Govt. of India (ILTP Programme)
- **Project Code:** ILTP/INT/ILTP/B 2.29(NP-29)
- **Year:** 2002
- **Role:** Co-PI

National Projects: 03

1. Investigation of Space Weather Effects on Earth's Ionosphere Using GPS-Based Measurements

- **Sponsor:** NITTTR
- **Project Code:** CFP2022P3/PI
- **Approval Date:** 25/01/2023
- **Role:** PI

2. Pulsed Wire System for Undulator Measurement

- **Sponsor:** NITTTR
- **Project Code:** CFP2022O5/CoPI
- **Approval Date:** 25/01/2023
- **Role:** Co-PI

3. Studies on Ionospheric Variabilities

- **Sponsor:** University Grants Commission (UGC)
- **Project Code:** 4-32(2/2001)(MRP/CRO)
- **Year:** 2001
- **Role:** PI

Projects for Educational Institutes

- 1 National Vocational Educational Qualification and Certification Frame work (2003-04).
- 2 MHRD-AICTE faculty Development Project- co-coordinator for winter School programs.
- 3 Video programs production for Open and Distance Education (Bhoj University, Bhopal).
- 4 Developed and edited 14 modules for vocational project.
- 5 Developed higher order module on IPR for swyam for senior teachers of technical institutions as coordinator.

Books Authored: 07

1. **Antarctica: A Planet of the Planet (2013)**
 - **Author:** P.K. Purohit
 - **Publisher:** Scholars Press, Germany
 - **ISBN:** 978-3-639-51212-0
2. **Ionospheric Study of Equatorial Anomaly Station (2012)**
 - **Authors:** Shweta Mukherjee, P.K. Purohit, A.K. Gwal
 - **Publisher:** Academic Publishing, Germany
 - **ISBN:** 978-3-8433-5566-7
3. **Antarctic: Ek Rahashymay Mahadeep**
 - **Author:** P.K. Purohit
 - **Publisher:** Indra Publishing House, Bhopal
 - **ISBN:** 978-93-80834-09-2
4. **Antarctic Where the Silence Speaks**
 - **Author:** P.K. Purohit
 - **Publisher:** Indra Publishing House, Bhopal
 - **ISBN:** 81-89107-03-08
5. **Antarctic: Aakarshan Kyon-----? (2005)**
 - **Author:** P.K. Purohit
 - **Publisher:** Indra Publishing House, Bhopal
 - **ISBN:** 81-89107-143
6. **Antarctic: Vigyan evam Chunotiyana (Science and Challenges) (2003)**

- **Authors:** P.K. Purohit and A.K. Gwal
- **Publisher:** M.P. Hindi Granth Academy

2. Number of Training Program Conducted :-More than two hundred