SHAMSH PERVEZ

Professor & US Fulbright Research Fellow School of Studies in Chemistry Pt Ravishankar Shukla University, Raipur, CG, 492010 Mobile: 09425242455; 09753413202 Email: shamshpervez@gmail.com



Ph.D.	Chemical Sciences	1992
M.Sc.	Physical Chemistry	1989
B.Sc.	Physics, Chemistry, Mathematics	1987



Pt Ravisha	nkar	Shu	kla	Univer	sity,	Raipur

Pt Ravishankar Shukla University, Raipur

Pt Ravishankar Shukla University, Raipur

Research activities

Publications	130	h- Index	32	i-10 index	72	Citati	on index	2755	Conference presentations	70	Projects	14
Reviewer For Journals 25		25	Ne	wspaper	vspaper interviews >1000		Member of Professional bodies			oodies	04	
PhD superv	PhD supervised 12]	MPhil suj	l supervised 09		09	Professional Environ. Consultancy			05	
SERB-DST Project Evaluation/Referee 67		67	USIEF, USA (Project evaluation)		21	CCOST, CG, Project Evaluation		luation	08			
Evaluation/RefereeCG PlanningCommission ProjectEvaluation		Project Evaluator for PSA to Honorable PM, India		01 Policymaking Reports for State Planning Commission, CC			03					

Experience

Dr. Shamsh Pervez, professor and head of the School of Studies in Chemistry, Pt Ravishankar Shukla University, Raipur, India, has over 30 years of academic and research experience in the fields of physical chemistry, atmospheric chemistry, air quality monitoring and assessment, receptor modeling source apportionment, and environmental health. Dr. Pervez was awarded the U.S. Fulbright fellowship in the 2010 Environmental Leadership program and worked at Desert Research Institute, Reno, NV, USA. As professor of chemistry, Dr. Pervez teaches post-graduate and M.Phil students, enrolled for advanced degrees in chemical and environmental sciences. As the leader of the Air Quality Research Laboratory, he leads more than 100 research studies to: 1) characterize suspended atmospheric particles for source attribution and their effects on health; 2) evaluate the optical, molecular and thermal properties of atmospheric black and brown carbon; 3) determine the toxic elements in human target organ, blood, urine, and bronchial washouts among pollution affected communities; 4) develop new methods for removal of toxic metals from contaminated water; and 5) measure emissions from mineral based coal-fired industries to evaluate contaminated air, water streams, and soils.

Examples of six major research projects include: 1) Source Apportionment of Classified Atmospheric Dust Fractions using Selected Receptor Models; 2) Spatial Variability and Impact Study of Anthropogenic Mercury in Selected Environments; 3) Evaluation of Biomass Burning Emissions to Address Sources of Atmospheric Brown Carbon and Associated Impacts on Regional Climate; 4) A Novel Hyphenated Single Drop Micro Extraction - Diffuse and Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy Technique for Analysis of Multiatomic

Metaloxy Anions; 5) Study of Physico-chemical Characterization of Respirable Dusts in Selected Environments; and 6) Environmental Pathway and Human Response Studies on the Impact of Water Borne Fluoride Amongst Inhabitants of Korba Chhattisgarh with total outlay ~ US\$ 210,000 were carried out under the leadership of Dr. Pervez.

Dr. Pervez was the principal author or coauthor of ~103 peer-reviewed journal articles which have >1300 citations; served as reviewer for over 20 peer-reviewed journals; and delivered over 50 presentations at technical conferences and training sessions.

Professional Experience

2018 to Present	Elected president, Pt Ravishankar Shukla University Teacher's Association, Raipur, Chhattisgarh, India.
	Member, State Task Force on Environmental Management in the state of
	 Chhattisgarh, 2021 Chairman/Coordinator, state level working group, under the Task Force, on 1) Air quality improvement and management in the state of Chhattisgarh & 2) Safe disposal and value-added products of fly ash and char/dolo-char in the state of Chhattisgarh, 2021 Expert Member, REDD Plus State Cell (Reducing Emission from Deforestation and Forest Degradation), Government of Chhattisgarh Subject Expert Member, Research Project Evaluation Committee, SERB-DST, New Delhi, United State Indian Education Foundation, Department of State, U.S. Government, Chhattisgarh Council of Science and Technology, Raipur, Planning Commission, CG Government, Raipur
2009 to Present	 Professor, School of studies in chemistry, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India. 1. Teaching physical & Environmental chemistry in M.Sc. and M. Philosophy Level (Topics: Quantum chemistry, Spectroscopy, Mathematical Chemistry, Computers in Chemistry, Air pollution Monitoring & Assessment; Air Quality Modeling) 2. Formulation of syllabus of M.Sc. and M. Philosophy in Chemistry & Environmental Science levels 3. Research supervision in the field of: 1) Source apportionment of atmospheric pollutants using air quality models (UNMIX 6.0, PMF 3.0 & EV-CMB 8.2), 2) Environmental Pathways of Mercury, 3) Development of emission factors and emission budget of atmospheric carbonaceous matter; 4) Wastewater Treatment using novel adsorbents
Jan 2011-May 2011	US Fulbright Research Fellowship in Environmental Leadership
	 Center: Desert Research Institute, Reno, NV, USA Training on air quality receptor models from US Environmental Protection Agency (EV-CMB 8.2 and PMF 3.0). These are regulatory

models in United States

	3. Training on Arc-GIS for geographical mapping of air pollution zones in
	an urban area.
	4. Training & hands on experience on advanced sophisticated analytical instruments: OC/EC analyzer, TD-GC-MS, ICP-MS, ED-XRF, AAS and air samplers.
	5. Field training on study designing and sampling plan for air quality studies.
	 Invited Talk on "mercury pollution in urban areas" delivered in Reno and in Las Vegas via video conferencing
2006 to 2009	Associate Professor, School of studies in chemistry, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India.
2003 to 2006	Reader, School of studies in chemistry, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India.
2004 to 2009	Administrative Officer (Additional Charge), University Institute of
	Technology, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India
	 Creation and recruitment of faculty position and non-teaching/technical staff
	2. Designing of all lab formats for all eight semesters according to Model curriculum of AICTE
	3. Involved in adoption of new AICTE model curriculum in Engineering disciplines
	4. Financial assignments including fee structure, staff salaries & budget of the institute
	5. Designing of Institute building construction plan and arrangement of construction grant
1994 to 2003	Assistant Professor, Department of Higher Education, Government of Madhya Pradesh/Chhattisgarh (Directly recruited through Public Service Commission
1994 to 1994	Research Associate, Council of Scientific and Industrial Research (CSIR), at School of studies in chemistry, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India.
1992 to 1994	Senior Research Fellow, Council of Scientific and Industrial Research (CSIR), at School of studies in chemistry, Pt Ravishankar Shukla University, Raipur, Chhattisgarh, India.

Example of Certificates, Honors and Awards

U.S. Fulbright Research Fellow, US Fulbright Board, 2010.

Research Associateship, CSIR, New Delhi, 1994

Senior Research Fellowship, CSIR, New Delhi, 1992

AMPs 5th National award for excellence in education as Head of the Institute, Honorary, Association of Muslim Professional, 2021

AMPs 5th National award for excellence in education as University Teacher, Honorary; Association of Muslim Professional, 2021

Professional capabilities in Organizing Conferences/seminar/symposia

Chair, Convener and organizing secretary of:

- 1. International Conference on recent trends in chemistry and Convention of Chemists, Indian Chemical Society, Pt Ravishankar Shukla University, Raipur, India, November 14-16, 2019,
- One day Conference on Recent Advances in Functional Nanomaterial, Chaired the keynote address on the occasion of 125th Birth Anniversary of Prof SN Bose, Organized by S.N. Bose National Centre for Basic Sciences and Pt Ravishankar Shukla University, Raipur, 28 September, 2018
- 3. 22nd CRSI- National Symposium in Chemistry and 12th CRSI-Royal Society of Chemistry Symposium, organized by Chemical Research Society of India (CRSI) at Pt Ravishankar Shukla University, Raipur during February 1-4, 2018,
- 4. Black carbon emissions in developed and developing countries, Session No. 3A, Chaired the session, Air % Waste Management (A7WMA) International conferences entitled, "Aerosol and Atmospheric Optics: Visibility and Air Pollution, Whitefish, MT, USA, 24-28 September 2012.
- 5. International symposium on environmental-analytical & Toxicological issues of speciation in atmospheric organic pollutants, In expert collaboration with Desert Research Institute, December 06-07, 2012
- 6. International Symposium on Novel Approaches to air quality management and improvement in India, In expert collaboration with Desert Research Institute, Reno, NV, USA, September 5-7, 2011
- 7. International conference on Arsenic in Environment, 2010

Secretary/member in local/international organizing/steering committee:

- 1. International conference on Atmospheric Optics: Aerosols, Visibility, and the Radiative Balance, A&WMA Visibility Specialty Conference, Snow King Hotel, Jackson Hole, WY, September 27-30, 2016
- 2. Convention of Chemists-2010;
- 3. International symposium on air quality India, September 5-7' 2011;
- 4. International symposium on organic pollutants, December 6-7' 2012
- 5. International conference on Arsenic in Environment, 2010

Project completed/on going

S.No.	Торіс	Duration	Funding agency	Total outlay	Remark
1.	Study of Physico-chemical Characterization of Respirable Dusts in Selected Environments (Principal Investigator)	1999-2002 (02 yrs)	Ministry of environment & forests, New Delhi	INR 3,92,000	completed
2.	Spatial Variability and Impact Study of Anthropogenic Mercury in Selected Environments (Principal Investigator)	2004-2007 (03 yrs)	Ministry of environment & forests, New Delhi	INR 10,00,000	Completed

3	Source Apportionment of Classified Atmospheric Dust Fractions using Selected Receptor Models (Principal Investigator)	2011-2014 (03 yrs)	Ministry of Science and Technology, New Delhi	INR 51,00,000/-	Completed
4.	Environmental Pathway and human response studies on impact of water borne fluoride amongst inhabitants of Korba, Chhattisgarh (Co-Investigator)	2013-2015	CGCOST, Chhattisgarh	INR 5.00 Lac	Completed
5.	A Novel Hyphenated Single DropMicro Extraction - Diffuse andAttenuated Total Reflectance FourierTransform Infrared Spectroscopy(SDME-DRS/ATR-FTIR) Techniquefor Analysis of Multiatomic MetaloxyAnions(Co-Investigator)	2013-2015	SERB-DST	INR 37.00 Lac	Completed
6.	Evaluation of Biomass Burning Emissions to address sources of atmospheric Brown Carbon and associated impacts on regional climate (Principal Investigator)	2017	SERB-DST	INR 55.00 Lac	completed
7.	Prevalence and characteristics of chronic kidney disease (CKD) in Supebada village of Devbhog block and Piperkhutta village of Manpur block in Gariyaband district (Co-PI)	2022	ICMR, India	INR 8.00 lac	On going
8	Emission Characterization and removal studies of hazardous gaseous pollutants at domestic heating sources using novel approaches of functionalize carbon fiber-based materials (PI)	2023	SERB-DST, India	INR 79.9 Lac	On going
9	Integrative Approach towards Developing Sensing, Measurement Devices and Mitigation Methods for Environmental Pollutants known for Potential Impact on Health and Climate Change (PI)	2023	DST-PURSE, India	10.0 Crore	On going

	Consultancy/collaborative Research Projects							
1.	Assessing the Warming Amplification over South Asia due to Organic Carbon Aerosols from Residential Biofuel	2015-17	International Center for Advanced Renewable Energy and Sustainability (I-CARES)/ Washington University, St Louis, USA	US\$ 38000 (INR 26,60,000)	Completed			
2.	Development of Functionally imprinted Effective Absorbents from Petroleum Heavy Residue for the removal of water pollutants	2015-17	King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia	SR 105,303 (INR 21,06,060/-)	Completed			
3.	Characterization of Wavelength Dependent Mineral Dust and Biomass Burning Aerosol Single Scattering Albedo for GLORY Retrieval of Aerosol Parameters	January 1, 2011 – Dec 31, 2014	NASA ROSES: GLORY SCIENCE TEAM, USA	US\$ 482,989/- (INR 3,23,60263)	Completed			
4.	Building Research and Educational Capacity for Satellite Remote Sensing of Aerosols and their Radiative and Climate Change Impacts (Cooperative Agreement No. NNX10AR89A)	August 13, 2010 – August 12, 2014	NASA EPSCoR through Nevada System of Higher Education, NV, USA	US\$ 1,125,000 INR 7,53,75000	Completed			
5.	Characterization of Emissions Resulting from Religious and Ritual- Based Activities in India	May 2011- April 2013	DRI EVPR , USA Research Enhancement Program	US\$20,000 INR 13,40,000	Completed			

Research Collaborations

- 1. Desert Research Institute, Reno, NV, USA.
- 2. Department of Chemistry, King Fahad University of Petroleum & Minerals, Dhahran, KSA
- 3. Institute of Earth Environment, Chinese Academy of Sciences, Xi'An, China.
- 4. Indian Institute of Tropical Meteorology, New Delhi.
- 5. National Environmental Engineering Research Institute.
- 6. Moscow state university, Moscow, Russia
- 7. National Institute of Hydrology, Roorkee

Workshop/ Training Attended

- 1. Low-cost methods for development of chemical instrumentation, Refresher course, CPBHE, New Delhi (UGC Sponsored), March 25-April 20, 1994.
- 2. Teaching Orientation Course, ASC, June 30- July 22' 1998, Lucknow University, India
- 3. Air pollution monitoring protocol and statistics involved by NEERI, Nagpur, India, 2000.
- 4. Source apportionment of air pollutants using CMB8 Model of EPA at NEERI, Bombay, India, 2004.
- 5. Training on chemical instrumentation: OC & EC Analyzer, Thermal Desorption GCMS, ED-XRF, January 15- May 14' 2011, Desert Research Institute, Reno, NV, USA.
- 6. Training on ArcGIS 10.0, January 15- May 14' 2011, Desert Research Institute, Reno, NV, USA.
- 7. PM2.5 Sampling and Analysis for Extinction Calculation, Whitefish, Montana, USA, September 2012.

International visits to accomplish research assignments

- Indoor PM2.5 Levels, Sources, Markers and Associated Health Risks in Central India. 10th International Aerosol Conference 2018 (IAC-2018), American Association of Aerosol Research, Organized by Washington University, ST Louis, MO, September 2-7, 2018.
- Contrasting Temporal and Spatial Variation of Atmospheric Carbonaceous Aerosols during a Year Measurement in Central India, 10th International Aerosol Conference 2018 (IAC-2018), American Association of Aerosol Research, Organized by Washington University, ST Louis, MO, September 2-7, 2018.
- 3. Long Measurement in Central India. Expert meeting on international collaborative research program on atmospheric carbonaceous matter and associated climate change, Desert Research Institute, Reno, NV, USA, October 4-7, 2016, (Sponsorship from host institute, DST, India and Pt RS University).
- 4. Expert meeting to organize clean coal technology workshop, Department of Energy, Environment and Chemical Engineering, Washington University, St Louis, MO, USA, October 2-3, 2016 (Full sponsorship from host institute)
- 5. A&WMA's International Conference Atmospheric Optics: Aerosol, Visibility and Radiative Balance, Jackson Hole, Wyoming, USA, September 24-30, 2016, (Sposorship by organizers, DST, New Delhi and Pt RS University)
- 6. Research consultancy on development of Functionally imprinted effective adsorbents from petroleum heavy residue for the removal of water pollutants King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, April 09-19, 2016, (Full sponsorship from host institute).
- 7. Visibility Conference, Air & Waste Management, Whitefish, MT, USA, September 24-29' 2012 (Full Sponsorship by organizers).
- 8. Fulbright Fellowship, Desert Research Institute, Reno, NV, USA, January 15- May 14' 2011 (Full Sponsorship by organizers).
- 9th International Conference on Mercury as a Global Pollutant, Guiyang, China, June 7th to June 12th, 2009 (Full Sponsorship by organizers);
- 10. Batter Air Quality Workshop (BAQ 2006), Clean Air Initiatives, Asian Development Bank, Yogyakarta, Indonesia, December 12-16' 2006 (Full Sponsorship by organizers).
- 11. 10TH International Conference on Indoor Air Quality & Climate (Indoor Air 2005) at Tsinghua University, Beijing, China during September 3-9' 2005 (Full Sponsorship by organizers).
- 12. CHEMINDIX 2013, Bahrain, November 2013(Partial sponsorship).

Invited talk and session chair in conferences/seminar/symposium

- 1. Recent findings of aerosols and air quality research in Chhattisgarh, National Seminar on Environmental conservation and sustainable development in Chhattisgarh, organized by Govt Kavyopadhyay Hiralal College, Abhanpur, Raipur, CG, sponsored by Chhattisgarh Council of Science and Technology, 16th January 2018.
- 2. Recent findings to address issues of aerosols and air quality research associated to urban climate, National conference on Advances in Chemical and Environmental Sciences, (UGC-SAP-DRS-II), Pt Ravishankar Shukla University, Raipur, March 18, 2017.
- 3. Status of air quality in sub-tropical region of Indian Sub-continent, keynote address on expert meeting to organize clean coal technology workshop, Department of Energy, Environment and Chemical Engineering, Washington University, St Louis, MO, USA, October 2-3, 2016 (Full sponsorship from host institute)
- 4. Air pollution source apportionment using receptor models, All India conference (AICON-2009), (AICTE sponsored) Feb. 6-8' 2009, CSIT, Durg, India (Invited Talk).
- 5. Air pollution monitoring and modeling, All India conference (AICON-2010), (AICTE sponsored), January 22-24' 2010, CSIT, Durg, India (Invited Talk).
- 6. Source Signatures of House-Indoor Dust Fall in Urban-Industrial Area using PMF and CMB, Conference of Indian Council of Chemists-2011, December 27-30' 2011, Osmania University, Hyderabad, India, (Invited Talk).
- 7. Significant Contribution of Emissions from Asian Religious and Cultural Activities to Atmospheric Brown Clouds, Invited Talk in Aerosol and Atmospheric Optics: Visibility & Air Pollution Specialty Conference, Air & Waste Management Association (A&WMA), September 24-29, 2012, Whitefish, MT, USA, (Invited Talk).
- Black Carbon Emissions in Developed and Developing Countries, Chairman of Session 3a. Aerosol and Atmospheric Optics: Visibility & Air Pollution Specialty Conference, Air & Waste Management Association (A&WMA), September 24-29, 2012, Whitefish, MT, USA, (Session Chair).
- 9. Novel Approaches to Air Quality Management and Improvement in India, Winter School Program, School of Studies in Life Science, December 14, 2013
- Source Apportionment of Classified Atmospheric Dust Fractions: Study of Selected Receptor Models, Vth Meeting of Program Advisory Committee on Atmospheric Sciences (PAC-AS), Bhubaneswar, April 27-28 ,2014
- 11. Air Pollution Status in Chhattisgarh: Sources, Health Effects and Control Measures, Summer School Program, School of Studies in Geology, June 19, 2014
- 12. Air Pollution Status in Chhattisgarh: current status and source apportionment, National Conference on Innovation and Advancement in Chemical Sciences and Technology, St Thomas College, Bhilai, India, February 10, 2015
- 13. Current updates of air quality monitoring and management, National Science Day-2015 Government D.T. College, Utai, Durg, India, March 03, 2015
- Status of Particulate Matter in India: Objective Oriented Studies, Training Programme on "Monitoring of PM_{2.5} and other notified air pollutants as per revised NAAQS" CSIR-NEERI, Delhi, November 16-20, 2015
- 15. PM2.5 Chemical Source Profiles of Emissions Resulting from Industrial and Domestic Burning Activities in India, symposium on "Recent advancements in Atmospheric Chemistry Research" 34th Annual Conference, Indian Council of Chemists, 27th December, 2015

- 16. Evaluation of Biomass Burning Emissions to address Sources of Atmospheric Brown Carbon and Associated Impacts on Regional Climate and Health Risks, 1st PAC Meeting, Department of Science and Technology (DST), Ministry of Science and Technology, Government of India, Cotton college State University, Guwahati, Assam, November 24, 2015;
- 17. Recent findings to address Issues of Aerosols and Air quality research associated to urban climate, All India conference on clean and green technology (AICON' 16), April 22-23, 2016, Chhatrapati Shivaji Institute of Technology, Durg.

Member of academic & research bodies

- 1. Indian Aerosol Science & Technology Association
- 2. American Chemical Society,
- 3. Indian Science Congress Association
- 4. Indian Chemical Society
- 5. Chemical Research Society of India

Reviewer/ Referee, Research Journals

- 1. Public Health, Elsevier
- 2. Journal of Exposure Science and Environmental Epidemiology
- 3. Indian Journal of Radio and Space Physics, CSIR, India
- 4. Journal of Atmospheric Pollution Research (Elsevier)
- 5. Aerosol and Air Quality Research
- 6. Atmospheric Environment (Elsevier)
- 7. Science of Total Environment (Elsevier)
- 8. Environmental Science and Pollution Research
- 9. Chemosphere (Elsevier)
- 10. Ozone: Science & Engineering
- 11. Atmospheric Research (Elsevier)
- 12. Building & Environment (Elsevier)
- 13. Environmental Geochemistry and Health
- 14. Environmental Monitoring and Analysis
- 15. Journal of Molecular Liquids
- 16. Natural hazards (Elsevier)

Research Publications

- 1. Aishwaryashri Tamrakar, Shamsh Pervez, Judith C Chow, John G Watson, Yasmeen Fatima Pervez, Manas Kanti Deb, Mohammad Nahid Siddiqui, 2025, Spatiotemporal variability, atmospheric chemistry implications and health risk assessment of ambient volatile organic compounds in Central India, Environmental Geochemistry and Health, 47(7): 1-17
- 2. Shubhra Sinha, Rajiv Nayan, Vaibhav Dixit, Manmohan L Satnami, Shamsh Pervez, Suryakant Manikpuri, Indrapal Karbhal, Manish K Rai, Manas Kanti Deb, 2025, Polyaniline and N, S co-doped Graphene Nanocomposite for Efficient Energy Storage, Next Research (Elsevier), 100368,
- 3. Archi Mishra, Shamsh Pervez, Yasmeen Fatima Pervez, Madhuri Verma, Princy Dugga, Sushant Ranjan Verma, Indrapal Karbhal, Kallol K Ghosh, Manas Kanti Deb, Manmohan L Satnami,

Kamlesh Shrivas, 2025, Particulate toxic elements' oxidative potential and gastrointestinal bioaccessibility features in the vicinities of coal-fired mineral processing industries, India, Environmental Geochemistry and Health, 47 (3): 72

- 4. Ankita Tejwani, Urvashi Sonkar, Kamlesh Shrivas, Khushali Tandey, Indrapal Karbhal, Manas Kanti Deb, Shamsh Pervez, 2025. Differential pulse voltametric detection of dopamine using polyaniline-functionalizedgraphene oxide/silica nanocomposite for point-of-care diagnostics, RSC advances (Royal Society of Chemistry), 15(20): 15870-15878
- Manish Kumar, Shubhra Sinha, Rajiv Nayan, Manmohan L Satnami, Manas Kanti Deb, Kallol K Ghosh, Shamsh Pervez, Kamlesh K Shrivas, Vaibhav Dixit, Indrapal Karbhal, 2024. PANI Incorporated Fe-MOF: As an Electrode Material for Supercapacitor, Journal of Ravishankar University (PART-B), 37(2): 195-205
- 6. Khushali Tandey, Kamlesh Shrivas, Anuradha Sharma, Tushar Kant, Ankita Tejwani, Manas Kanti Deb, Shamsh Pervez, Kallol K Ghosh, 2024, Nanomaterial-enabled portable paper-based colorimetric and fluorometric devices: Progress in point-of-care diagnosis, Coordination Chemistry Reviews, 514, 1 September 2024, 215919
- Rajiv Nayan, Shubhra Sinha, Vaibhav Dixit, Manmohan L Satnami, Kallol K Ghosh, Shamsh Pervez, Manas Kanti Deb, Kamlesh Shrivas, Manish K Rai, Sandeep G Yenchalwar, Kundan Wasnik, Sandesh R Jadkar, Indrapal Karbhal, 2024, PANI-grafted boron, nitrogen co-doped carbon fiber: An outstanding, high-performance supercapacitor electrode, Journal of Energy Storage, 96, 15 August 2024, 112668.
- Pinki Miri, Manmohan L Satnami, Sanjay Ghosh, Rekha Nagwanshi, Indrapal Karbhal, Vishal Jain, Yogyata Chawre, Ankita Beena Kujur, Akash Sinha, Kallol K Ghosh, Shamsh Pervez, Bhanushree Gupta, 2024, Assessment of Acetylcholinesterase Activity Using the Gold Nanocluster–MnO2 Nanosheet Pair for Detection of Paraoxon, ACS Applied Nano Materials (American Chemical Society), 7 (16): 19657–19667
- 9. Dharini Sahu, Shamsh Pervez, Indrapal Karbhal, Aishwaryashri Tamrakar, Archi Mishra, Sushant Ranjan Verma, Manas Kanti Deb, Kallol K Ghosh, Yasmeen Fatima Pervez, Kamlesh Shrivas, Manmohan L Satnami, 2024, Applications of different adsorbent materials for the removal of organic and inorganic contaminants from water and wastewater–A review, Desalination and Water Treatment, 317: January 2024, 100253
- 10. Ankita B Kujur, Manmohan L Satnami, Yogyata Chawre, Pinki Miri, Akash Sinha, Rekha Nagwanshi, Indrapal Karbhal, Kallol K Ghosh, Shamsh Pervez, Manas Kanti Deb, 2024, Inner-filter effect of nitrogen-doped carbon quantum dots–MnO 2 nanotubes for smartphone-integrated dual-mode sensing of glutathione and captopril, RSC advances (Royal Society of Chemistry), 14(28): 20093-20104
- 11. Vaibhav Dixit, Rajiv Nayan, Shubhra Sinha, Suryakant Manikpuri, Manmohan L Satnami, Kallol K Ghosh, Manas Kanti Deb, Shamsh Pervez, Indrapal Karbhal, 2023, Rice Straw-Derived Carbon Integrated with PANI: As an Electrode Material for High-performance Supercapacitor, Journal of Ravishankar University (Part-B), 36(2), 60-71
- 12. Tikeshwari, Kamlesh Shrivas, Sanyukta Patel, Monisha, Tushar Kant, Santosh Singh Thakur, Shamsh Pervez, Manas Kanti Deb, Kallol K Ghosh, 2023, Dual-Mode Plasmonic and Paper-Based Colorimetric Assays for the Determination of Riboflavin in Green Leafy Vegetables and Whole Grains, ACS Food Science & Technology, 3(11), 1824-1834
- 13. Aamir Sultan Lone, Mohd Shahnawaz, Neha Singh, Shamsh Pervez, KC Ravindran, 2023, Metabolomic and antioxidant potential analyses of the rhizome and leaves of Podophyllum

hexandrum Royle: A comparative account, Biocatalysis and Agricultural Biotechnology, 52, 102836

- 14. Sushant Ranjan Verma, Shamsh Pervez, Judith C Chow, John G Watson, Syed Muzaffarali Andrabi, Papiya Mandal, Noor Afshan Khan, Suresh Tiwari, 2023, Optical Properties of Fine Mode Aerosols over High-Altitude Himalayan Glacier Regions, ACS Earth and Space Chemistry, 7(8), 1536-1544
- 15. Yogyata Chawre, Manmohan L Satnami, Ankita B Kujur, Kallol K Ghosh, Rekha Nagwanshi, Indrapal Karbhal, Shamsh Pervez, Manas K Deb, 2023, Förster Resonance Energy Transfer between Multicolor Emissive N-Doped Carbon Quantum Dots and Gold Nanorods for the Detection of H2O2, Glucose, Glutathione, and Acetylcholinesterase, ACS Appl. Nano Mater. 2023, 6, 9, 8046–8058.
- S Sinha, I Karbhal, MK Deb, A Saha, R Nayan, R Kurrey, S Pervez, 2023, Nitrogen and Sulphur co-doped Graphene: A Robust Material for Methylene Blue Removal, Carbon Trends, 10, 100248.
- 17. Archi Mishra, Shamsh Pervez, Madhuri Verma, Carla Candeias, Yasmeen Fatima Pervez, Princy Dugga, Sushant Ranjan Verma, Indrapal Karbhal, Kallol K Ghosh, Manas Kanti Deb, Manmohan L Satnami, Kamlesh Shrivas, Aishwaryashri Tamrakar, 2022. Chemical fractionation of particulate-bound metal (loid) s to evaluate their bioavailability, sources and associated cancer risk in India, Science of The Total Environment, 857: 159516
- 18. Sushant Ranjan Verma, Shamsh Pervez, Papiya Mandal, Judith C Chow, John G Watson, Syed Muzaffarali Andrabi, Madhuri Verma, Princy Dugga, Noor Afshan Khan, Yasmeen Fatima Pervez, Archi Mishra, Manas Kanti Deb, Indrapal Karbhal, Suresh Tiwari, Kallol K Ghosh, Kamlesh Shrivas, Manmohan Lal Satnami, 2022, Atmospheric Abundance of PM2. 5 Carbonaceous Matter and Their Potential Sources at Three High-Altitude Glacier Sites over the Indian Himalayan Range, ACS Earth and Space Chemistry, https://doi.org/10.1021/acsearthspacechem.2c00216
- 19. Aishwaryashri Tamrakar, Shamsh Pervez, Madhuri Verma, Dipanjali Majumdar, Yasmeen Fatima Pervez, Carla Candeias, Princy Dugga, Archi Mishra, Sushant Ranjan Verma, Manas Kanti Deb, Kamlesh Shrivas, Manmohan L Satnami, Indrapal Karbhal, 2022. BTEX in Ambient Air of India: a Scoping Review of their Concentrations, Sources, and impact, Water, Air, & Soil Pollution, 233(10): 1-19
- 20. Sanyukta Patel, Kamlesh Shrivas, Deepak Sinha, Tarun Kumar Patle, Sanjay Yadav, Santosh Singh Thakur, Manas Kanti Deb, Shamsh Pervez. 2022. Smartphone-integrated printed-paper sensor designed for on-site determination of dimethoate pesticide in food samples, Food Chemistry, 383: 132449, <u>https://doi.org/10.1016/j.foodchem.2022.132449</u>
- 21. T Kant, K Shrivas, K Dewangan, A Kumar, NK Jaiswal, MK Deb, Shamsh Pervez, 2022, Design and development of conductive nanomaterials for electrochemical sensors: a modern approach, Materials Today Chemistry, Volume 24, June 2022, 100769, <u>https://doi.org/10.1016/j.mtchem.2021.100769</u>
- 22. Mohammad Nahid Siddiqui, Shamsh Pervez, Indrapal Karbhal, Princy Dugga, Saravanan Rajendran, Yasmeen Fatima Pervez, 2022, Using functionalized asphaltenes as effective adsorbents for the removal of chromium and lead metal ions from aqueous solution, Environmental Research, 204, Part D, March 2022, 112361
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