

CURRICULAM VITAE

Dr. Balram Ambade



Associate Professor
Head
Department of Chemistry,
National Institute of Technology,
Jamshedpur 831014,
India.

Contacts:

Contacts: Mob. No.: +91-9122056501

E-mail: bambade.chem@nitjsr.ac.in

bambade@gmail.com

bambade@iiserb.ac.in

*Education everyone must have. Means of defence everyone must have.
These are the paramount requirements of every man for his self-
preservation.*

Personal Details

First Name : Balram
Surname : Ambade
Date of Birth : 11 June 1981
Nationality : Indian
Sex : Male
Marital Status : Married (One son & one daughter)
Language : English, Hindi, Telugu, Marathi, Chhattisgarhi

Research Interests

1. Analytical Chemistry
2. Environmental Chemistry
3. Atmospheric Chemistry
4. Source apportionment modelling
5. Polycyclic organic Compound (PAHs), Black Carbon (BC), Trace gases, HM
6. Chemistry-Climate Change and Human health risk assessment.
7. Air and Water quality
8. Uranium and other radioactive elements

Professional Experience

May 2018 – Present : Associate Professor, Department of Chemistry, National Institute of Technology Jamshedpur, India
April 2012 – May 2018 : Assistant Professor, Department of Chemistry, National Institute of Technology Jamshedpur, India
October 2011 – April 2012 : Post-Doctoral Research Associate, Department of Earth and Environmental Sciences (EES), Indian Institute of Science Education and Research (IISER) Bhopal, India
September 2010 – May 2011 : Assistant Professor, Department of Chemistry, Vindhya Institute of Technology and Science Raipur, India
September 2005 – December 2009: Lecturer, Department of Chemistry, Government Engineering College Raipur, India

Academic Qualifications

Ph.D. : (2010), School of Studies in Chemistry, Pt. R.S.U. Raipur, 492010, India
Thesis: Analytical studies of precipitate (Rain and Fog) and Runoff water pollution
Supervisor: Prof. K. S. Patel
M.Sc. : (2004), Govt. Digvijay Autonomous Post Graduate College Rajnandgaon.
Pt. R.S.U. Raipur, India
B.Sc. : (2002), Government Science College, Rajnandgaon, Pt. R.S.U. Raipur, India
12th. : (1999), Jawahar Navodaya Vidyalaya, Dongargarh CBSE, New Delhi, India
10th : (1997), Jawahar Navodaya Vidyalaya, Dongargarh, CBSE, New Delhi, India

Courses Teaching (Subjects taught / teaching)

a) At UG level:

- (1) Taught Applied Chemistry and Environmental and Ecology in B.E. In GEC Raipur & VITS Raipur.
- (2) Teaching Engineering Chemistry papers for engineering courses in the First and Second Semesters in N.I.T. Jamshedpur.
- (3) Faculty advisor for Engg. Chemistry Laboratory

b) At PG level:

- (1) Characterization of Materials CHG7131
- (2) Corrosion test and pollution Aspect CHG7122
- (3) Material Science and Engineering CH4103
- (4) Characterization of Materials CHG7131
- (5) Organic Chemistry Laboratory CH2103
- (6) Inorganic Chemistry Laboratory CH3104

(c) At Ph.D. (Course Work):

- (1) Corrosion test and pollution Aspect CHG7122
- (2) Material Science and Engineering CH4103
- (3) Characterization of Materials CHG7131

Details of new courses developed:

M.Tech. (Surface Science and Engineering) was started in 2013, Developed course curriculum as member and convenor of Board of studies (BOS) at NIT Jamshedpur	Developed course structure 1st, 2nd, 3rd, and 4th semester syllabus
M.Sc. (Chemistry) was started in 2015, My role was to develop course curriculum as a member and convenor of the Board of studies (BOS) at NIT Jamshedpur	Developed course structure 1st, 2nd, 3rd, and 4th semester syllabus.

Fellowship/Awards

- (i) CCMI travel grant to attend fifth Chemistry-Climate Model Initiative (CCMI) Science Workshop by Météo-France, Toulouse, **France** (13rd - 15th June 2017)
- (ii) Young Scientist award to participate in Open Science Conference by Institute of Atmospheric Physics, Chinese Academy of Sciences Beijing, P. R. **China** (April 7-10, 2014)
- (iii) Full travel award by Marie Curie Award, by the European Commission to attend Dynamics of Diversity in the Globalisation Era EURODIV 5th Conference FEEM, Milan, **Italy** (October 22 -23, 2009)
- (iv) GBB Grant to Participate EMBN Workshop on Membrane proteins and proteomics, Bernoulliborg University of Groningen the Netherlands Framework of the EU-EMBNTrain project by Groningen Biomolecular Sciences and Biotechnology Institute (GBB), **Netherlands** (January 27 - 31, 2008)
- (v) Travel award to attend International Conference of the International Global Atmospheric Chemistry by NASA Earth Science Division Modeling, Analysis, and Prediction (MAP) Program at Annecy, **France** (September 7-12, 2008)

- (vi) Full travel award by Marie Curie Award, by the European commission to attend Fourth EURODIV Diversity in Cities: New Models of Governance at IPRS, Rome, **Italy** (September 16-17, 2008)
- (vii) Marie Curie Grant, by European Commission, for a participating training course “Physics and chemistry of air pollution and their effects: field course and data analysis” held at Hyytiälä forestry field station, **Finland**, (March 10 - 19, 2008)
- (viii) **GATE** Qualified (Chemical Sciences, 2005)
- (ix) SERB Early Career Research (ECR) Awardee

RESEARCH & DEVELOPMENT PROJECTS

Ongoing Project

(1) International Project:

Project Title: Seasonal influence on transboundary mercury transport over the Himalayas: Implications for society and potential risk.

Project Reference Number: CRRP2021-12MY-Paudyal

Sponsored Agency: **APN under Collaborative Regional Research Programme (CRRP), Japan**

(2) National Project

Project Title: Random verification of Annual Inventory on Hazardous Waste Management
Sponsored Agency: **Central Pollution Control Board (CPCB), Ministry of Environment, Forest & Climate Change, Govt. of India.**

Completed Project:

1. Title: Black carbon Aerosols over Jamshedpur: Source, Radiative Forcing and Climate impact
Funding Agency: **DST-SERB**
Fund allotment: Rs. 36, 80,000 (Thirty-Six Lakh Eighty thousand rupees only)
Duration: March 2018 to Feb 2021
Role: Principal Investigator
2. Title: Spatial distribution of uranium and associated water quality parameters in groundwater /drinking water of Seven districts (East Singhbhum, Saraikela Kharsawan, West Singhbhum, Khunti, Simdega, Gumla, Latehar) of Jharkhand
Funding Agency: **BRNS**
Fund allotment: Rs. 27,51,800 (Twenty-seven Lakh Fifty-One Thousand eight hundred rupees only)
Duration: Oct 2018 to Sept 2020
Role: Principal Investigator
3. Title: Design and development of eco-friendly absorbent and comfortable sanitary napkin
Funding Agency: **NID, MHRD**
Fund allotment: Rs. 2, 70,000 (Two lakh seventy thousand rupees only)
Duration: Nov 2018 to Oct 2019
Role: Principal Investigator

4. Title: Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmosphere of Jamshedpur, East India: sources, human health risk assessment and climate effects
Funding Agency: **DST-SERB**
Fund allotment: Rs. 28,99,000 (Twenty-Eight Lakh Ninety-Nine Thousand rupees only)
Duration: March 2017- Feb 2020
Role: Principal Investigator (PI)

Administrative Experience:

(a) Institute Level:

- Associate Dean (S &W), NIT Jamshedpur (17-10-2017 to 28-09-2018)
- Assistant Dean (S &W), NIT Jamshedpur (14- 05- 2016 to 16-10-2017)
- Assistant Registrar (Student Welfare) NIT Jamshedpur (28-01-2016 to 13-05-2016)
- Assistant Registrar (Academic) NIT Jamshedpur (15-05-2015 to 27-01-2016)
- Assistant Warden (Hostel A, B, H) NIT Jamshedpur (22-11-2012 to 26-09-2015)
- Subject Expert, Selection board constituted for faculty recruitment in Chemistry (2018), Sarla Birla University Ranchi
- Nominated as a Member of the Assessment Committee at CSIR-NML (2019)
- Chairman, Departmental Purchase Committee (DPC) May 2019- till date
- Member, Convocation 2013-2014
- Member, Reservation, and welfare cell (2019- till date)
- Liaison officer (2019 to 17/08/2021)
- Member of editorial board/ reviewer of national and international research journals of high impact factor
- Member, Institute library committee (2013-2017)
- Member, Institute admission Committee (2013-2017)
- Member, standing committee on academic ethics (2019-onwards)
- Special Invitee, Senate, NIT Jamshedpur (2019-onwards)
- Coordinator, National Knowledge Network (NKN) under National Clean Air Program (NCAP) Project (2020)

(b) Department Level

- Head of Department (Chemistry), NIT Jamshedpur from 14.05.2019 to till date.
- Professor In-charge, Timetable (Jan 2014 - June 2016)
- Member, Departmental Purchase Committee, Department of Chemistry during 24.09.2013- 13.05.2015
- Chairman, Department safety committee (2019-onwards)
- Faculty Advisor M.Tech, M.Sc. and Ph.D. (2014-2018)
- Chairman, SRC of Department of Chemistry (2019- onwards)
- Chairman, Doctoral scrutiny committee (DSC) 2019
- Professor In-charge UG laboratory (2012-2019)
- Professor In-charge PG laboratory (2014-2018)

Short Term/Workshop/Conference/ Organized:

a) As Coordinator

- Coordinator, National Workshop on “Green Chemistry and Sustainable Development” (GCSD-2017) sponsorship with Technical Education Quality Improvement Programme (TEQIP) Phase-II for 2 days event (17-03-2017 to 18-03-2017) in the Department of Chemistry, NIT Jamshedpur
- Coordinator, MHRD Scheme on Global Initiative on Academic Network (GIAN) GIAN 2017 Course Code : [171025C06] Course Title: Unified Biochemical Pollution and Hydrologic Modelling with Professor Vijay P. Singh, Distinguished Professor, a Regents Professor, and the inaugural holder of the Caroline and William N. Lehrer Distinguished Chair in Water Engineering in the Department of Biological and Agricultural Engineering and Zachry Department of Civil Engineering at Texas A&M University & Dr. CH. Madhusudana Rao, CE, NIT Jamshedpur April 9–14, 2018

b) As Chairman

- Chairman, Virtual National Conference on “Catalysis and Photocatalysis for Clean Energy (CPCE)-2020”, organized by the Department of Chemistry, NIT Jamshedpur on October 9-10, 2020.
- Chairman, National Level webinar on "COVID-19 Pandemics and Waste managements (2020)", on September 26, 2020, organized by Ramnagar College, Depal, West Bengal in collaboration with NIT Jamshedpur.

Invited Talks:

- UGC-SAP-DRS-III National Conference on Advances in Environmental and Chemical Sciences “, Pt. R.S.U. Raipur during 27-28 March 2019
- International Virtual Conference on Interdisciplinary Development in Science, Technology, and Humanities (IVCIDSTH-2020) held online from 5-6, August 2020.
- National Workshop on “Green Chemistry and Sustainable Development” (GCSD-2017), NIT Jamshedpur
- UGC-SAP-DRS-II National Conference on Advances in Environmental and Chemical Sciences “held during March 20-21, 2020, at Pt. Ravishankar Shukla University, Raipur
- National Level webinar on "COVID-19 Pandemics and Waste management (2020)
- National Seminar, “Value and Importance of Mathematical Physics”, 5 th December 2014, Govt. Rajeev Lochan College, Rajim, Dist. Gariaband (C.G.) 493885

Academic Foreign Visits:

Country	Duration of Visit	Programme
France	13rd - 15th June 2017	Chemistry-Climate Model Initiative (CCMI) Science Workshop by Météo-France, Toulouse
	September 7-12 2008	International Conference of the International Global Atmospheric Chemistry
China	April 7-10, 2014	Open Science Conference
Italy	October 22 -23,2009	Dynamics of Diversity in the Globalisation Era EURODIV 5th
	September 16-17, 2008	Fourth EURODIV Diversity in Cities: New Models of Governance
Netherland	January 27 - 31, 2008	EMBN Workshop on Membrane proteins and

		proteomics
Finland	March 10 - 19, 2008	Physics and chemistry of air pollution and their effects: field course and data analysis
Bangladesh	April 01-04,2007	International Conference and Exhibition on Water and Wastewater Treatment

Professional Membership

- Member, International Association of Hydrological Sciences [IAHS] Membership no.:12504
- Member, International Association of Engineers [IAENG], Membership no: 125450

Reviewer:

- Journal of Hazardous, Toxic, and Radioactive Waste, ASCE
- Nature hazards, Springer
- Environmental Pollution, Elsevier
- Building and Environment, Elsevier
- Atmospheric Pollution Research, Elsevier
- Ain Shams Engineering Journal, Elsevier
- Urban Water Journal, Elsevier

Ph. D. Thesis Supervision:

No.	Name of student	Status	Supervision	Title/ Topic
1	Dr. Basant Shubhankar 2013RSCH001	Completed, 2018	Full Supervisor	Investigation of aerosol characteristics from burning activities in Jamshedpur
2	Dr. Amit Kumar 2017RSCH001	Completed, 2021	Full Supervisor	Atmospheric deposition of Polycyclic Aromatic Hydrocarbons (PAHs) in East India
3	Mr. Susanta Kumar Pradhan 2018RSCH001	Thesis Submitted 2021	Full Supervisor	Separation and determination of selected trace elements in geo-materials by chemico-analytical methods
4	Mr. Shrikanta Shankar Sethi 2018RSCH004	Submission stage (Jointly with Dr. CHMS Rao)	Main Supervisor	Characterization and fate of Polycyclic Aromatic Hydrocarbons (PAHs) in water and sediment over East India”
5	Mr. Tapan Kumar Shankar. 2018RSCH003	Submission stage	Full Supervisor	Characterization of Black Carbon in Eastern India and their associated health risks and sources apportionment”.

Ongoing				
1	Mr. Dilip Kumar Mahato 2020RSCH001	Ongoing	Full Supervisor	
2	Mr. Ali Jaan Hussain 2020RSCH004	Ongoing	Full Supervisor	

M. Tech Thesis Supervision: 11

No.	Name of student	Status	Title/ Topic
1	Mr. Bhupendra Daharwal 2013PGCHSS001	Completed June 2015	Application of Isocynate derivatives in coating systems to product substrate
2	Mr. Kiran Kumar Reddy Meka 2013PGCHSS001	Completed June 2016	Synthesis and characterization of phosphorous and nitrogen functionalized flame retardant foams using azide alkyne click reaction
3	Mr. Diwakar Dubey 2015PGCHSS002	Completed June 2017	Comparative study of different steel & their corrosion protection through surface coating used in automotive industry
4	Ms. Bharti Malviya 2015PGCHSS004	Completed June 2017	Elevated temperature erosion of thermal barrier and abradable coating
5	Ms. Pratiksha Sharma 2015PGCHSS006	Completed June 2017	Single crystal silicon carbide
6	Mr. Shubham Tiwari 2016PGCHSS05	Completed June 2018	Process mapping of fasteners and their corrosion protection through coating used in automotive industry
7	Mr. Abhishek Raj 2016PGCHSS08	Completed June 2018	Monitor corrosion resistance performance of various paint systems for offshore and related structures using accelerated environment testing and electro impedance spectroscopy
8	Mr. Manishankar Kumar 2016PGCHSS02	Completed June 2018	Cycle time reduction of specific sandmill batches
9	Mr. Keshav Kundan 2016PGCHSS01	Completed June 2018	Analysis of corrosion resistance property of cold bended 316L and 6MO stainless steel pipes
10	Ms. Shruti Sinha 2017PGCHSS04	Completed June 2019	Studies of mild steel corrosion
11	Mr Pranay Trivedi 2018PGCHSS05	Completed June 2020	Comparative Oxidation and Hot Corrosion Behaviour Studies of P91 and IN617 Alloys

M.Sc. Thesis Supervision: 26

No.	Name of student	Status	Title/ Topic
1	Ms. Lalita Phalswal 2015PGCHCH011	Completed June 2017	Studies on various methods for arsenic removal techniques
2	Mr. Anuj Kumar Rawat 2015PGCHCH013	Completed June 2017	Studies of Arsenic in drinking water of Jamshedpur
3	Mr. Vikash Singh 2016PGCHCH11	Completed June 2018	Assessment of Indoor Air quality caused By solid fuels and incense sticks
4	Mr. Kushal Tripathi 2016PGCHCH09	Completed June 2018	Arsenic Contamination in Ground Water
5	Ms. Garima Sharma 2016PGCHCH05	Completed June 2018	An Analysis of Volatile Organic Compounds in Air
6	Ms. Priya suman Central University of Bihar	Completed June 2014	Study of heavy metals in heavy traffic area of Jamshedpur
7	Mr. Rohit Bhardwaj Central University of Bihar	Completed June 2014	Chemical characterization of PM10 during summer months of Jamshedpur city
8	Ms. Richa Rao 17MSCCHEM21095 JWC, Jamshedpur	Completed June 2019	Characterization of PM2.5 over semi urban area of Jamshedpur
9	Ms. Krishna Tudu, 17MSCCHEM21093 JWC, Jamshedpur	Completed June 2019	Characterization of PM2.5, PM10, SO2, NO2, Ozone and CO over urban area of Jamshedpur
10	Ms. Kakoli, 17MSCCHEM21090 JWC, Jamshedpur	Completed June 2019	Characterization of PM2.5, PM10, SO2, NO2, Ozone and CO over rural area of Jamshedpur
11	Ms. Kavita Patro 17MSCCHEM21091 JWC, Jamshedpur	Completed June 2019	Characterization of PM2.5, PM10, SO2, NO2, Ozone and CO over industrial area of Jamshedpur
12	Mr. Suraj Bhaisal 2017PGCHCH02	Completed June 2019	A comparisons study of heavy metals and fish sample in Kharkai River in and outside of Jamshedpur
13	Mr. Niloy Sarkar, 2017PGCHCH12	Completed June 2019	Studies of sediment in Kharkai River, Jamshedpur
14	Mr. Jujhar Majhi, 2018PGCHCH18	Completed June 2020	Fluoride Occurrence and Human Health risk in drinking Water in East Singhbhum district, Jharkhand, India
15	Ms. Neha Rani, 2018PGCHCH10	Completed June 2020	Study of PM2.5 associated BC over Jamshedpur
16	Ms. Sweta Singh, 18MSCCHEM24667 JWC, Jamshedpur	Completed June 2020	Water quality analysis and Flouride contamination at Subarnarekha River in Jamshedpur
17	Ms. Saniya Marfani, JWC201802527 JWC, Jamshedpur	Completed June 2020	Determination of physio-chemical parameters of river Kharkai and hill river.
18	Ms. Shireen Azad 18MSCCHEM25090 JWC, Jamshedpur	Completed June 2020	Analysis of Groundwater collected from Potka Area
19	Ms. Prity Kumari	Completed	Groundwater Analysis in Gamaria,

	15JWC12362, 18MSCCHEM25148 JWC, Jamshedpur	June 2020	Adityapur and Jamshedpur area
20	Ms. Suparna Pati 15JWC1236 JWC, Jamshedpur	Completed June 2020	Analysis of water quality index of Dimna and Hudco lake
21	Mr. Swarup Das 2019PGCHCH02	Completed June 2021	Literature review on PAHs
22	Prem Chopra CUJ/I/2016/IEVS/14	Completed June 2021	Phytoremediation of mining soil using different native plant species
23	Mr. Vikash Mahato 2019PGCHCH13	Completed June 2021	Literature review on Black carbon
24	Mr. Chandan Kumar Singh 2019PGCHCH22	Completed June 2021	Per- and polyfluoroalkyl substances (PFAS)
25	Prateek padhan	Ongoing	
26	Biswa mohan malik	Ongoing	

List of Publications

Book: V

- i. Textbook of Atmospheric Chemistry, Cambridge Publisher (under publishing, 2021)
Author: Dr. B.Ambade
- ii. Physico-Chemical Assessment of Rain, Fog and Runoff Water, 2012, ISBN: 978-3-659-30271-8, Lap-Lambert Academic Publishing, Germany
Author: Dr. B. Ambade
- iii. Toxicity of Fluorides in the Environment, 2012, ISBN: 978-3-8465-2902-7, Lap-Lambert Academic Publishing, Germany
Author: Dr. B. Ambade and Dr. Sampad Ghosh
- iv. Handbook of Novel Drug Delivery, (2021) Nova Science Publishers, Inc. 415 Oser Avenue, Suite N, Hauppauge, NY 11788 USA, Author: Dr. Balram Ambade, Dr. Rajendra Kumar Jangde, and Sulekha Khute
([Book translated in 11 international languages](#))
- v. Characterization of Ambient Aerosol
Chemical Characterization of Aerosols from burning activities Scholars' Press
ISBN-10: 6203341851 ISBN-13: 978-6203341850
Balram Ambade (Author), Basant Shubhankar (Author)

Book Chapters: 4

- K. S. Patel, **B. Ambade**, S. Sharma, D. Sahu, N. K. Jaiswal, S. Gupta, R. K. Dewangan, S. Nava, F. Lucarelli, B. Blazhev, R. Stefanova, and J. Hoinkis, Lead environmental Pollution in central India, New Trends in Technologies, Edited by Blandna Ramov, 2010, 65- 76. (ISBN: 978-953-7619-62-6), Publisher: In Tech. PROJECTS
- **Balram Ambade**, Basant Shubhankar, Sudarshan Kurwadkar, Amit Kumar, Santosh Kumar Verma, Sarita Gajbhiye Meshram, Chandrashekhar Meshram, Sonu Kumar Goyal Polychlorinated biphenyl in sediments of Subarnarekha River: levels, spatial and temporal distribution, possible sources, and inventory (2020), Dioxin:

Environmental Fate, Human Health, and Ecological Consequences, Edited By Sudarshan Kurwadkar, Prabir K. Mandal, Shivani Soni, <https://www.taylorfrancis.com/books/9781315170961> (ISBN 9781315170961), Pp 35.

- **Balram Ambade**, Shrikanta S Sethi, Amit Kumar, Tapan K Sankar (2021) Polycyclic aromatic hydrocarbon toxicity in riverine sediment and surface water of Subarnarekha River and its tributary, India, Handbook of Miniaturized Analytical Devices, ISBN 978-3-527-34758-2, WILEY (Wiley-VCH)
- Tushar Kant, Nohar Singh Dahariya, Vikas Kumar Jain, Balram Ambade, Kamlesh Shrivastava (2021) Application of silver nanoparticles as a chemical sensor for detection of pesticides and metal ions in environmental samples, Silver Nanomaterials for Agri-Food Applications Nanobiotechnology for Plant Protection 2021, Pages 429-452
<https://www.sciencedirect.com/science/article/pii/B9780128235287000305>

Paper presented on Conference/workshop/events:

1. B. Ambade, K. S. Patel, Simple Method for Field Detection of Arsenic In Water Sample, International Conference on Arsenic Contamination in Tropics, Pt. Ravishankar Shukla University, Raipur, India, Feb. 19-21, 2007.
2. B. Ambade, K. S. Patel, Arsenic in Road Dust Samples, International Conference on Arsenic Contamination in Tropics, Pt. Ravishankar Shukla University, Raipur, India, Feb. 19-21, 2007.
3. B. Ambade, K. S. Patel, Rapid Method for Detection of Arsenic, International Conference and Exhibition on Water and Wastewater Treatment, Shahjalal University of Science & Technology (SUST), Sylhet, Bangladesh, Apr 01-04, 2007.
4. B. Ambade, R. S. Dhundhel, Learning of chemistry with the aid of- computer, National Seminar on Multidisciplinary Approach Of Computer Science In Higher Education, Kamla Nehru College, Korba, Chhattisgarh, Dec. 15-16, 2005.
5. B. Ambade, S. K. Mishra, Chemical Composition of rainwater, "Educon- An International Conference on GATS & EDUCATION, Punjabi University, Patiala, Punjab, India, Dec. 28-30, 2005
6. B. Ambade, K. S. Patel, Fog and precipitation Pollution in Central India, Annecy, France on September 7-12, 2008
7. B. Ambade, K. S. Patel, Diversity in Cities: New Models of Governance, Rome, Italy September 16-17, 2008
8. B. Ambade, K. S. Patel, Water resources and Freshwater Ecosystem in India, Milan, Italy October 22 -23, 2009

Publications: 54 (5 Single Author papers)

1. Kurwadkar S, Dane J, Kanel S R, Nadagouda M.N, Cawdrey R. W, **Ambade B**, Struckhoff G.C, Wilkin R, (2021) Per- and polyfluoroalkyl substances in water and wastewater: A critical review of their global occurrence and distribution, Science of The Total Environment, <https://doi.org/10.1016/j.scitotenv.2021.151003> (IF: **7.963**).
2. **Ambade B.**, Sethi S. S, Giri B, Biswas J K, Bauddh K (2021) Characterization, Behavior, and Risk Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in the

- Estuary Sediments, Bulletin of Environmental Contamination and Toxicology DOI: 10.1007/s00128-021-03393-3 (IF: **2.129**)
3. **Ambade B**, Kumar A, Kumar A., Sahu LK (2021) Temporal variability of atmospheric particulate bound Polycyclic Aromatic Hydrocarbons (PAHs) over Central East India: Sources and carcinogenic risk assessment, Air Quality Atmosphere & Health 10.1007/s11869-021-01089-5 (IF: **3.76**)
 4. **Ambade B**, Kumar A, Sahu LK (2021) Characterization and health risk assessment of particulate bound polycyclic aromatic hydrocarbons (PAHs) in indoor and outdoor atmosphere of Central East India, Environmental Science and Pollution Research, DOI: <https://doi.org/10.1007/s11356-021-14606-x> (IF: **4.223**)
 5. **Ambade B**, Kurwadkar, Sankar TK, Kumar A (2021) Emission reduction of black carbon and polycyclic aromatic hydrocarbons during COVID-19 pandemic lockdown, Air Quality, Atmosphere & Health DOI: <https://doi.org/10.1007/s11869-021-01004-y> (IF: **3.763**)
 6. **Ambade B**, Sankar TK, Panicker A.S., Gautam A S, Gautam S (2021) Characterization, Seasonal variation, source apportionment and health risk assessment of black carbon over an urban region of East India, Urban Climate, 38, 100896; <https://doi.org/10.1016/j.uclim.2021.100896> (IF: **5.731**)
 7. **Ambade B**, Sankar T K (2021) Source Apportionment and Health Risks Assessment of Black Carbon Aerosols in an Urban Atmosphere in East India, Journal of Atmospheric Chemistry, DOI: <https://doi.org/10.1007/s10874-021-09418-9> (IF: **2.207**)
 8. Pradhan S K, **Ambade B** (2020) Extractive separation of rare earth elements and their determination by inductively coupled plasma optical emission spectrometry in geological samples, Journal of Analytical Atomic Spectrometry, 35,1395-1404, DOI: 10.1039/D1JA90032C (IF: **4.023**)
 9. Md. Foysal Hasan, Md. Nur-E-Alam, Mohammed Abdus Salam, Hafizur Rahman, Shujit Chandra Paul, Aweng Eh Rak, **Ambade Balram**, Abu Reza Md. Towfiqul Islam (2021) Health Risk and Water Quality Assessment of Surface Water in an Urban River of Bangladesh, *Sustainability*, 13(12), 6832; <https://doi.org/10.3390/su13126832> (IF: **3.251**)
 10. Pradhan S K, **Ambade B** (2021) A scheme for sequential separation of thorium, lanthanides, uranium in geo-materials and their ICP-OES determination, Journal of Radioanalytical and Nuclear Chemistry, <https://doi.org/10.1007/s10967-021-07785-x> (IF: **1.371**)
 11. **Ambade B**, Sethi S S, Kurwadkar S, Kumar A, Sankar T K (2021) Toxicity, and health risk assessment of PAHs in surface water, sediments and groundwater

- vulnerability, Groundwater for Sustainable Development, <https://doi.org/10.1016/j.gsd.2021.100553> (CiteS: **5.8**)
12. **Ambade B**, Sankar T K, Kumar A, Gautam A S, Gautam S (2021) COVID-19 lockdowns reduce the Black carbon and polycyclic aromatic hydrocarbons of the Asian atmosphere: source apportionment and health hazard evaluation, Environment, Development and Sustainability, DOI: <https://doi.org/10.1007/s10668-020-01167-1> (**IF: 3.219**)
 13. Pradhan S K, **Ambade B** (2021) Determination of trace uranium in thorium matrix by laser induced fluorimetry after separation of thorium by its fluoride precipitation using NH₄HF₂, Radiochimica Acta, <https://doi.org/10.1515/ract-2020-0050> (**IF: 1.440**)
 14. **Ambade B.**, Sethi SS., (2021) Health Risk Assessment and Characterization of polycyclic aromatic hydrocarbon from hydrosphere, Journal of Hazardous, Toxic, and Radioactive Waste Mgmt DOI: [10.1061/\(ASCE\)HZ.2153-5515.0000586](https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000586) ASCE (American Society of Civil Engineering) 25(2), 05020008
 15. **Ambade B**, Sethi SS, Kumar A, Sankar TK., (2021) Health Risk Assessment, composition and distribution of Polycyclic Aromatic Hydrocarbons (PAHs) in Drinking Water of Southern Jharkhand, East India, Archives of Environmental Contamination and Toxicology 80, pages120–133, DOI: <https://doi.org/10.1007/s00244-020-00779-y> (**IF: 3.399**)
 16. Pradhan SK, **Ambade B**, Tarafder PK. (2020) An evolved fluorimetric determination of uranium in rock/mineral sample solutions containing hydrolysable elements such as Nb, Ta, Zr and Ti sequestered by bi-fluoride, Applied Radiation and Isotopes, Volume 160, June 2020, 10912, 6, DOI: <https://doi.org/10.1016/j.apradiso.2020.109126>, (**IF- 1.513**)
 17. Meshram S G, Kahya E , Meshram C, Ali M G, **Ambade B**, Mirabbasi R (2020) Long term temperature trend analysis associated with agriculture crops, Theoretical and Applied Climatology, 140, 1139–1159, DOI: <https://doi.org/10.1007/s00704-020-03137-z>, (**IF- 3.375**)
 18. Kumar A., **Ambade B.**, Sankar T. K., Sethi S. Kurwadkar S (2020) Source identification and health risk assessment of atmospheric PM_{2.5}-bound polycyclic aromatic hydrocarbons in Jamshedpur, India, Sustainable Cities, and Society DOI: <https://doi.org/10.1016/j.scs.2019.101801>, 52, 101801. (**IF: 7.587**)
 19. Kumar A., **Ambade B.**, Sankar T. K., Sethi S.S. (2020) Characteristics, Toxicity, Source identification and Seasonal variation of Atmospheric Polycyclic Aromatic Hydrocarbons over East India, Environmental Science and Pollution Research, DOI: [10.1007/s11356-019-06882-5](https://doi.org/10.1007/s11356-019-06882-5), 27, 1, 678–690 (**IF- 4.306**)

20. **Ambade B**, Sankar TK, Kumar A, Sethi SS. (2019) Characterization of PAHs and n-alkanes in atmospheric aerosol of Jamshedpur city, India, *Journal of Hazardous, Toxic, and Radioactive Waste Mgmt* (2020) *ASCE Journal*, DOI: [10.1061/\(ASCE\)HZ.2153-5515.0000490](https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000490)
21. Pradhan S. K., **Ambade B.**, Tarafder P. K. (2019) Separation and Pre-concentration of Trace Uranium (VI) by Solid Phase Extraction with 2,3-Dihydroxynaphthalene and Cetyltrimethyl ammonium Bromide on Molten Naphthalene and its LED Fluorimetric Determination in Water Samples, *Analytical Sciences*, DOI: 10.2116/analsci.19P216 (**IF: 2.418**)
22. Pradhan S. K., **Ambade B.**, Tarafder P. K. (2019) Speciation of Fe (II) and Fe (III) in Geological Samples by Solvent Extraction and Flame-Atomic Absorption Spectrometry (F-AAS), *Atomic Spectroscopy* 40, 4 (**IF: 4.023**)
23. Pradhan S.K., **Ambade B.** (2019) A modified method for the determination of uranium in Nb/Ta minerals by LED Fluorimetry, *Journal of Radioanalytical and Nuclear Chemistry*, 320, 2, 459–466 (**IF: 1.371**)
24. **Ambade B.** (2018) The air pollution during Diwali festival by the burning of fireworks in Jamshedpur city, India, *Urban Climate*, 26, 149-160 <https://doi.org/10.1016/j.uclim.2018.08.009> (**Single Author**) **IF: 5.731**
25. Meshram S G, Singh S K., Meshram C., Deo R C., **Ambade B.** (2018) Statistical Evaluation of Rainfall Time Series in Concurrence with Agriculture and Water Resources of Ken River Basin, Central India (1901-2010) *Theoretical and Applied Climatology* 1-13, 2017, DOI: 10.1007/s00704-017-2335-y (**IF: 3.375**)
26. Shubhankar B, **Ambade B** (2016) Chemical characterization of carbonaceous carbon from industrial and semi urban site of eastern India, *Springer Plus* 5 (1), 1-17 DOI: 10.1186/s40064-016-2506-9 (**IF:3.1**)
27. Ghosh S, Ray A, Pramanik N, **Ambade B** (2016) Can a cationic surfactant mixture act as a drug delivery vehicle? *Comptes Rendus Chimie*, 19 (8), 951–954 (**IF: 2.223**)
28. Shubhankar B, **Ambade B** (2016) A critical comparative study of indoor air pollution from household cooking fuels and its effect on health, *Oriental Journal of Chemistry*, 32 (1), 473-480 <http://dx.doi.org/10.13005/ojc/320154> (**NS-5.05**)
29. Shubhankar B, **Ambade B**, Singh SK, Meshram SG (2016) Characteristics and seasonal variation of Carbonaceous and Water-soluble organic Components in the aerosols over East India, *Oriental Journal of Chemistry* 32 (1), 523-532 (**NS-5.05**)
30. Shubhankar B, **Ambade B** (2016) A Review on Deposition, Distribution of Polycyclic Aromatic Hydrocarbons in Different Environmental Matrix and Study its Toxicity and Carcinogenic Effect, *Asian Journal of Chemistry* 28 (11), (**IF: 3.698**)

31. Shubhankar B, **Ambade B** (2016) Review on Composition, Emission sources of RSPM, TSPM, Heavy metals and Ions with effect on environment and health, Research Journal of Chemistry and Environment, 20, 10,2016 (IF-0.2)
32. Shubhankar B, **Ambade B** (2016) A Critical Assessment of PM10 (Carbonaceous Aerosol) and Ions from Biomass Burning on the Rural Side of Jamshedpur (TATA), India, Journal of Basic and Applied Engineering Research 3(1)19-23.
33. Shubhankar B, **Ambade B** (2016) Health Impacts of Indoor Air Pollution of PM10 Size from Household Cooking Activities, Journal of Basic and Applied Engineering Research, 3(1)35-40.
34. Shubhankar B, **Ambade B** (2016) A review on deposition of atmospheric PAHs and interaction with other environmental matrices and its source apportionment with respect to Indian scenario, RASĀYAN Journal of Chemistry, 9(2) 243 – 253.(I S- **1.23**)
35. Shubhankar B, **Ambade B** (2016) Identification and Analysis of PM_{2.5} WSIS and Trace Gases during Winter Season at Industrial Zone of Tatanagar, Journal of Applicable Chemistry, 2016,5(3):637-645
36. Shubhankar B, **Ambade B** (2016) Spatio-temporal variability of ambient trace gas pollutants and their PCA predication: a comprehensive review, RASĀYAN Journal of Chemistry, 9 (2)112 – 120.(IS- **1.23**)
37. Shubhankar B, **Ambade B** (2016) Toxicities of PM_{2.5}, Polyaromatics hydrocarbon on indoor air emitted during fuming of incense and mosquito coil materials, Int. J. Chem. Sci.: 14(2), 2016, 545-558
38. **Ambade B** (2016) Characterization of PM₁₀ over urban and rural sites of Rajnandgaon, central India, Natural Hazards 80 (1), 589-604 DOI: 10.1007/s11069-015-1985-2 ([Single Author](#)), (IF- **3.656**)
39. **Ambade B** (2015) Chemical composition of runoff water in Raipur city, central India, Applied Water Science 5 (1), 1-12 DOI: 10.1007/s13201-014-0163-0 ([Single Author](#)) (IF- **4.393**)
40. **Ambade B** (2014) Characterization and Source of Fog Water Contaminates in Central India, Natural Hazards, 70, 1535-1552 DOI: 10.1007/s11069-013-0892-7 ([Single Author](#)) (IF- **3.656**)
41. **Ambade B** (2014) Seasonal Variation and Sources of Heavy Metals in hilltop of Dongargarh, Central India, Urban Climate, 9, 155-165([Single Author](#)), IF: **5.731**
42. Giri B, Patel KS. Jaiswal N. Sharma S. **Ambade B.**, Wang W., Simonich S., Simoneit BRT., (2013) Composition and Sources of Organic Tracers in Aerosol Particles of Industrial Central India, Atmospheric Research, 120-121, 312-324. IF: **5.369**

43. **Ambade B.**, Ghosh S (2013) Characterization of PM10 in the ambient air during Deepawali festival of Rajnandgaon district, India, *Natural Hazards*, 69, 1, 589-598 DOI: 10.1007/s11069-013-0725-8, (**IF- 3.656**)
44. **Ambade B.**, Ghosh S (2013) Air Quality deterioration by Firecracker during Diwali Festival in Jamshedpur, India, *J. Appl. Chem.*, 2, 2, 352-358
45. **Ambade B.**, Ghosh S., Shubhankar B (2013) Ambient air quality of Jamshedpur city: A study with reference to SO₂, NO₂, RSPM and SPM contents *J. Appl. Chem.*, 2, 3, 539-544.
46. Ghosh S., **Ambade B.**, Ray A (2013) Stable Catanionic Vesicles as Drug Delivery Vehicle, *Science of Advanced Materials*, 5(12), 1837-1846. doi:10.1166/sam.2013.1649 (**IF: 5.866**)
47. Ghosh S., **Ambade B.** (2013) Interaction in Aqueous Mixtures of Sodium N-(n-Alkanoyl)-L-Alaninate and n-Alkyltrimethylammonium Hydroxide Surfactants: Effects of Composition and Hydrocarbon Chain Length, *Advanced Chemistry Letters*, 1, 174-181 DOI: <http://doi.org/10.1166/acl.2013.1018>
48. Ghosh S., Ray A., **Ambade B.** (2013) Chemistry for the Society and Industries, *Advanced Science Focus*, 1(4), 354-357 doi:10.1166/asfo.2013.1046
49. Ghosh S., **Ambade B.**, Ray A (2013) Gene Delivery Using Cationic Micelles and Vesicles, *Advanced Chemistry Letters*, 1(2), 93-103 doi:10.1166/acl.2013.1030
50. **Ambade B.**, Rao CH MS (2012) Assessment of Groundwater Quality with a Special Emphasis on Fluoride Contamination in Rajnandgaon District of Chhattisgarh State in Central India, *International Journal of Environmental Sciences*, 3, 2, 851-848
51. **Ambade B.**, Litrupa (2012) Evaluation of Heavy metal Contamination in Road Dust Fallout of Bhilai City, *Intern. J. of Adv. Eng. Res. and Stud* 1, 4, 81-83
52. Ghosh S., **Ambade B.**, Prasad S.K., Choudhary AK (2012) Simultaneous Extraction of Copper and Iron from Chalcopyrite Concentrates in Hydrochloric Acid Media: Effect of Additives and Temperature, *Research inventory: Intern. J. of Eng. and Sc.*, 1, 9, 8-13
53. Patel K.S., **Ambade B.**, Nicolás J., Yubero E. (2009) Chemical characteristics of rainwater in central India, *Ecology and Nature*, 12, 148-155.
54. **Ambade B.**, E.K. Janghel, M.K. Rai, G.L. Mundhara (2006) A new solid sorbent system for rapid monitoring of dehydrogenated nicotine by using furfural hydrochloric acid, *Chinese Chemical Letters*, 17,9,1267-1270, **IF- 6.779**

References:

1. Prof. Sudarshan Kurwadkar, Ph.D., PE, BCEE
Professor
Department of Civil and Environmental Engineering

800 N. State College Blvd.
California State University
Fullerton, CA 92831
Phone: (657) 278-2457
Fax: (657) 278-3916
Email: skurwadkar@fullerton.edu

2. Professor Vijay P. Singh, Ph.D., D.Sc., D. Eng. (Hon.), Ph.D. (Hon.), D.Sc. (Hon.), P.E., P.H., Hon. D. WRE, Academician (GFA)
Distinguished Professor
Regents Professor
Caroline and William N. Lehrer Distinguished Chair in Water Engineering
Department of Biological and Agricultural Engineering &
Zachry Department of Civil Engineering
Texas A and M University
321 Scoates Hall, 2117 TAMU
College Station, Texas 77843-2117, U.S.A.
Office: (979)-845-7028
Fax: (979)-862-3442
E-mail: vsingh@tamu.edu