Curriculum Vitae

Dr. Bharat Lal Sahu

B.Sc./M.Sc. (Gold Medalist), M.Phil., Ph.D., UGC-NET, CRSI Life Member

Assistant Professor

Department of Chemistry Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G. E-mail: <u>bharatred007@gmail.com</u> Mobile: +91 9907970312

Personal Details:

1.	Name	:	Dr. Bharat Lal Sahu
2.	Contact Address	:	H. No. 180, Alka Avenue, Near Uslapur Railway
			Station, Bilaspur, C.G.
			Pin Code – 495001
3.	Date of Birth	:	31/10/1984
4.	Category	:	OBC
5.	Language	:	Hindi, English

Educational Qualifications:

Examination/	Board/University	Subject	Year	Division/
Degree				Percent
Ph.D.	Pt. Ravishankar Shukla	Chemistry	2017	-
	University, Raipur			
UGC-NET	UGC, New Delhi	Environmental	2017	-
		Science		
M.Phil.	Pt. Ravishankar Shukla	Chemistry	2009	I, 78.1 %
	University, Raipur			
M.Sc.	Pt. Ravishankar Shukla	Chemistry	2008	I, 83.08%
	University, Raipur			
B.Sc.	Pt. Ravishankar Shukla	Chemistry, Botany,	2006	I, 76.17%
	University, Raipur	Zoology		
12 th	CG Board of Secondary	Physics, Chemistry,	2002	I, 73.8%
	Education, Raipur	Biology		
10 th	MP Board of Secondary	Science,	2000	I, 75.4%
	Education, Bhopal	Mathematics		

<u>Research</u> Experiences:

- One year, during M.Phil. (Chemistry), worked on Air Pollution (Environmental Science) and submitted dissertation under the supervision of Prof. Shamsh Pervez to Pt. Ravishankar Shukla University, Raipur (C.G.) entitled *"Study of human exposure to fine particulates among inhabitants of road traffic environment"*.
- Four years, during PhD and submitted thesis under the supervision of Prof. K. S. Patel to Pt. Ravishankar Shukla University, Raipur (C.G.) entitled "Studies on Distribution and Sources of Arsenic and Fluoride in Geological, Plant and Biological Samples of Ambagarh-Chowki Block".

<u>Teaching</u> <u>Experiences</u>:

- 1. One year teaching experience in Naveen College, Deobhog, Dist. Raipur (C.G.) in the session of 2009 2010 as an Asst. Professor (Contract).
- 2. One year teaching experience in Govt. Digvijay College, Rajnandgaon (C.G.) in the session of 2010 2011 as an Asst. Professor (Contract).
- 3. One year teaching experience in School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2011-2012 as an Asst. Professor (Contract).
- 4. One year teaching experience in School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2012-2013 as an Asst. Professor (Contract).
- 5. One year teaching experience in School of Studies in Environmental Science, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2013-2014 as a Guest Lecturer.
- 6. One year teaching experience in School of Studies in Environmental Science, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2014-2015 as a Guest Lecturer.
- 7. One year teaching experience in School of Studies in Environmental Science, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2015-2016 as a Guest Lecturer.
- 8. One year teaching experience in School of Studies in Environmental Science, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2016-2017 as a Guest Lecturer.
- 9. One year teaching experience in School of Studies in Environmental Science, Pt. Ravishankar Shukla University, Raipur (C.G.) in the session of 2018-2019 as a Guest Lecturer.

<u>Foreign</u> <u>Visit</u>:

Zurich, **Switzerland** Presented a research paper in the 19th ETH-Conference on Combustion Generated Nanoparticles, ETH, Zurich, Switzerland, 28th June to 1st July, 2015.

Fellowship:

• Got "**National Fellowship**" for OBC candidates from UGC New Delhi for the session of 2017-18. Only candidate from the CG state and second from all over the country.

Invited Talk:

Delivered an invited talk on the special occasion "National Science/Mathematical Day" in the Govt. Kunj Bihari Choubey College, Lal Bahadur Nagar, Rajnandgaon, CG, on 4th-5th March, 2016.

Project Work:

- Project Work has been submitted by five M.Sc. (4th Semester), Environmental Science Students under the supervision of me for the session of 2018-19.
- Project Work has been submitted by three M.Sc. (4th Semester), Environmental Science Students under the supervision of me for the session of 2016-17.
- Project Work entitled "Analysis of Groundwater Quality of Rajnandgaon City, CG" has been submitted to the department of Chemistry, Govt. Digvijay College, Rajnandgaon (C.G.), during M.Sc. in the year of 2008.

<u>Research</u> <u>Publications</u>:

- 1. **Sahu, B.L.**, Banjare, G.R., Ramteke, S., Patel, K.S. and Matini, L. (2016) Fluoride Contamination of Groundwater and toxicities in Dongargaon Block, Chhattisgarh, India, *Water Quality Exposure and Health*, 1-14. <u>doi:10.1007/s12403-016-0229-3</u>
- 2. Sahu, B.L., Rajhans, K.P., Ramteke, S., Patel, K.S., Wysocka, I. and Jaron, I. (2016) Geochemistry of Rare Earth Elements in Sediment of Central India. *Journal of Environmental Protection*, 7, 705-714. http://dx.doi.org/10.4236/jep.2016.75063
- 3. **Sahu, B.L.**, Ramteke, S., Rajhans, K. P., Patel, K.S., Wysocka, I. and Jaron, I. (2018) Contamination of pond with fluoride and heavy metals in central India. *Water Resources*, 6, 975-984.
- Patel, K. S., Sahu, B.L., Dahariya, N.S., Bhatia, A., Patel, R.K., Matini, L., Sracek, O. and Bhattacharya, P. (2015) Groundwater arsenic and fluoride in Rajnandgaon District, Chhattisgarh, northeastern India, *Applied Water Science*. DOI 10.1007/s13201-015-0355-2.
- Patel, K.S., Sahu, B.L., Ramteke, S., Jaiswal, N.K., Borgese, L., Gianoncelli, A. and Bontempi, E. (2015) Contamination of Arsenic and Other Heavy Metals in Rhizospheric Soil. *American Journal of Analytical Chemistry*, 6, 822-829. <u>http://dx.doi.org/10.4236/ajac.2015.610078</u>

- 6. Patel, K.S., Sahu, B.L., Ramteke, S. and Bontempi, E. (2016) Contamination of Paddy Soil and Rice with Arsenic, *Journal of Environmental Protection*. 7, 689-698, http://dx.doi.org/10.4236/jep.2016.75061
- Ramteke, S., Sahu, B.L., Dahariya, N.S., Patel, K.S., Blazhev, B. and Matini, L. (2016) Heavy metal contamination of leafy vegetables. *Journal of Environmental Protection*, 7, 996-1004. http://dx.doi.org/10.4236/jep.2016.77088
- 8. Patel, K. S., Sharma, R., **Sahu, B.L.**, Patel, R.K. and Matini, L. (2014) Ground Water Quality of Rajnandgaon City. *Asian journal of Water, Environment and Pollution*, 11, 31-37.
- Ramteke, S., Patel, K.S., Sahu, B.L., Deb, M.K., Giri, B., Aggarwal, S.G., Ren, H. and Fu, P. (2018) Spatial Variation, Distribution and Source Impacts in Urban Organic Aerosols. Asian Journal of Chemistry, 11, 2582-2590. https://doi.org/10.14233/ajchem.2018.21683
- Patel, K.S., Ramteke, S., Sahu, B.L., Nayak, Y., Sharma, S. and Hung, C.C. (2015) Polychlorinated Biphenyls Contamination of Sludge in India. *American Journal of Analytical Chemistry*, 6, 867-877. http://dx.doi.org/10.4236/ajac.2015.611082
- 11. Dahariya, N.S., Ramteke, S., **Sahu, B.L.**, Patel, K.S. and Matini, L. (2016) Urban groundwater quality in India. *Journal of Environmental Protection*, 7, 961-971. http://dx.doi.org/10.4236/jep.2016.76085
- Patel, K.S., Sahu, D., Dahariya, N.S., Sahu, B.L., Ramteke, S., Blazhev, B., Matini, L., Yubero, E. and Hoinkis, J. (2015) Contamination of Water, Dust, Soil, Rock and Urine with Fluoride in Central India. *Journal of Environmental Protection*, 6, 1347-1359. http://dx.doi.org/10.4236/jep.2015.612117
- Patel, K. S., Verma, A., Jaiswal, N.K., Sahu, B.L., Shrivas, K., Feldmann, J., Borgese, L., Gianoncelli, A., Bontempi, E., Lautentand, M. and Bhattacharya P. (2012) Arsenic concentration in soil, rice and straw in central India, Understanding the Geological and Medical Interface of Arsenic - As 2012, Proceedings of the 4th International Congress on Arsenic in the Environment, 22-27 July 2012, Cairns, Australia, Edited by Jack C. Ng, Barry N. Noller, Ravi Naidu, Jochen Bundschuh and Prosun Bhattacharya, CRC Press, Pages 508-509.
- Patel, K.S., Ramteke, S., Naik, Y., Sahu, B.L., Sharma, S., Lintelmann, J. and Georg, M. (2015) Contamination of Environment with Polycyclic Aromatic Hydrocarbons in India. *Journal of Environmental Protection*, 6, 1268-1278. http://dx.doi.org/10.4236/jep.2015.611111
- Patel, K.S., Chikhlekar, S., Ramteke, S., Sahu, B.L., Dahariya, N.S. and Sharma, R. (2015) Micronutrient Status in Soil of Central India. *American Journal of Plant Sciences*, 6, 3025-3037. http://dx.doi.org/10.4236/ajps.2015.619297
- Yadav, A., Rajhans, K.P., Ramteke, S., Sahu, B.L., Patel, K.S. and Blazhev, B. (2016) Contamination of Industrial Waste Water in Central India. *Journal of Environmental Protection*, 7, 72-81. http://dx.doi.org/10.4236/jep.2016.71007

- 17. Sahu, D., Ramteke, S., Dahariya, N.S., **Sahu, B.L.**, Patel, K.S., Matini, L., Nicolas, J., Yubero, E. and Hoinkis, J. (2016) Assessment of Road Dust Contamination in India. *Atmospheric and Climate Sciences*, 6, 77-88. http://dx.doi.org/10.4236/acs.2016.61006
- Dahariya, N.S., Rajhans, K.P., Yadav, A., Ramteke, S., Sahu, B.L. and Patel, K.S. (2015) Fluoride Contamination of Groundwater and Health Hazard in Central India. *Journal of Water Resource and Protection*, 7, 1416-1428. http://dx.doi.org/10.4236/jwarp.2015.717115
- Ramteke, S., Verma, V., Chakradhari, S., Sahu, P.K., Sahu, B.L., Rajhans, K.P., Yadav, A. and Patel, K.S. (2015) Pit lakes water quality of Chhattisgarh, India. *Journal of Geographic Information System*, 8, 28-39. http://dx.doi.org/10.4236/jgis.2016.81003
- Yadav, A., Sahu, Y.K., Rajhans, K.P., Sahu, P.K., Chakradhari, S., Sahu, B.L., Ramteke, S. and Patel, K.S. (2016) Fluoride Contamination of Groundwater and Skeleton Fluorosis in Central India. *Journal of Environmental Protection*, 7, 784-792. http://dx.doi.org/10.4236/jep.2016.76071

Papers in Conferences:

- Sahu, B.L., Patel, K.S., Fluoride Toxicities on Human and Domestic Animals in Dongargaon Block, Central India poster presentation in 22nd CRSI National Symposium in Chemistry 2018 organized by School of studies in Chemistry, Pt RSU Raipur, CG on February, 2nd-4th, 2018.
- Sahu, B.L., Patel, K.S., Fluorosis disease in Domestic animals of Dongargaon Block Chhattisgarh, India oral presentation in 1st North Indian Science Congress 2018 and International Conference on Science and Technology for sustainable future organized by Babasaheb Bhimrao Ambedkar University, Lucknow, UP on January, 11th –12th 2018.
- Sahu, B.L., Patel, K.S., Studies on Health Hazards in Human and Domestic Animals due to Fluoride Contamination in Central, India, oral presentation in National Seminar on Innovative Research in Biological & Chemical Sciences organized by MATS School of Biological and Chemical Sciences held at MATS University, Raipur, CG on March, 4th 2017.
- Sahu, B.L., Patel, K.S., "Heavy Metals Contamination in Field Soil, Field Water and Rice Samples" oral presentation in UGC-SAP (II), National Conference on Advances in Environmental & Chemical Sciences held at School of Studies in Chemistry, Pt. Ravishankar Shukla University on March, 17th-18th 2017.
- 5. **Sahu, B.L.** and Patel, K.S., "Fluoride Pollution and Health Issues in Dongargaon Block, Chhattisgarh, India" in 20th CRSI National Symposium in Chemistry organized by Dept. of Chemistry, Gauhati University, Guwahati, Assam on February, $2^{nd} - 5^{th}$, 2017.
- Sahu, B.L. and Patel, K.S., "Study on Aerosols from Mosquito Coils and Incense Sticks burning" in National Seminar on Advances in Environmental Science & Technology organized by Dept. of Botany, Govt. Digvijay College, Rajnandgaon, CG on January, 23rd-24th, 2017. (Best Poster Award)

- Sahu, B.L. and Patel, K.S., "Fluoride Pollution and Health Issues in Dongargaon Block, Chhattisgarh, India" in 1st Asian Conference Water & Land Management for Food & Livelihood Security organized by Indira Gandhi Agriculture University, Raipur, CG on January, 20th-22nd, 2017.
- Sahu, B.L. and Patel, K.S., "Fluoride Pollution in Dongargaon Block, Chhattisgarh" in National Conference on Soil Quality & Public Health organized by Dept. of Chemistry, Govt. Digvijay College, Rajnandgaon, CG on January, 17th-18th, 2017.
- 9. **Sahu, B.L.** and Patel, K.S., "Assessment of Water Quality in Pit Lake of Central India" in 53^{rd} Annual Convention of Chemists 2016 (National Conference) hosted by GITAM University, Visakhapatanam, AP, organized by Indian Chemical Society on December, $27^{th} 29^{th}$, 2016.
- Sahu, B.L. and Patel, K.S., "Fluoride contamination and Health hazards" in National Science Day Celebration organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG, on March, 12th, 2016. (1st Prize in Poster Presentation)
- Sahu, B.L. and Patel, K.S., "Characterization of Aerosols collected from Mosquito coils and Incense burning" in One day Symposium on Science, Technology and Humanity, organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG, on March, 10th, 2016. (3rd Prize in Poster Presentation)
- Sahu, B.L., "Fluoride contamination of groundwater and toxicities in Central India" in 14th Chhattisgarh Young Scientists Congress-2016, organized by Bilaspur University, Bilaspur, CG, sponsored by Chhattisgarh Council of Science & Technology, Raipur during 28th-29th Feb, 2016. (Chhattisgarh Young Scientist Award-2016)
- Sahu, B.L., Patel, K.S., Fluoride pollution of Groundwater in Central India, 103rd Indian Science Congress held at University of Mysore, Karnataka organized by The Indian Science Congress Association on January 3rd-7th, 2016.
- Sahu, B.L., Patel, K.S., Characterization of Mosquito Coil and Incense Aerosols, 19th ETH-Conference on Combustion Generated Nanoparticles organized by ETH Zurich, Switzerland on June 28th to July 1st, 2015.
- 15. Sahu, B.L., Patel, K.S., Contamination of Arsenic in groundwater in Ambagarh Chouki block, 13th Chhattisgarh Young Scientists Congress-2015 organized by Indira Gandhi Krishi Vishwavidyalaya, Raipur, CG sponsored by Chhattisgarh Council of Science & Technology, Raipur on 28th Feb-1st Mar, 2015.
- 16. Sahu, B.L., Patel, K.S., Sources of Arsenic and Other Trace Elements in groundwater in Ambagarh Chouki, 12th Chhattisgarh Young Scientists Congress-2014, organized by Pt. Ravishankar Shukla University, Raipur, CG sponsored by Chhattisgarh Council of Science & Technology, Raipur on February 17th – 19th 2014.
- Sahu, B.L., Patel, K.S., Groundwater quality of Rajnandgaon city, CG, India, National Conference on Recent Trends in Chemical Sciences, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG on January 23rd -25th, 2014.

- Sahu, B.L., Patel, K.S., Fluoride pollution in groundwater of Dongargaon, Chhattisgarh, National Science Day-2014 organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG on February, 28th 2014. (2nd Prize in poster presentation)
- 19. Sahu, B.L., Patel, K.S., Fluoride health hazards in human and animals in Ambagarh-Chowki block, International Symposium on Environmental-Analytical Toxicological Issues of Speciation in Atmospheric Organic Aerosols, hosted by Pt. Ravishankar Shukla University, Raipur in expert collaboration with Desert Research Institute, Reno, NV, USA on December 6th -7th, 2012.
- 20. Sahu, B.L., Patel, K.S., Contamination of field soil and rice with arsenic in Koudikasa village, Chhattisgarh, International Symposium on "Novel Approaches to Air Quality Management and Improvement in India" in expert collaboration with Desert Research Institute, USA, organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG on September 5th -7th, 2011.

Workshop/Symposia:

- 1. 12th CRSI-RSC Symposium organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, CG, on February, 1st, 2018.
- 2. 11th CRSI-RSC Symposium organized by Dept. of Chemistry, Gauhati University, Guwahati, Assam on February, 2nd, 2017.
- 3. Chemistry Teachers Workshop jointly organized by Pt. Ravishankar Shukla University, Raipur and Royal Society Chemistry, WIS. during October 6th-8th, 2015.
- 4. Second International Workshop on Hadronic Chemistry, Physics and Mathematics organized by Department of Chemistry Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur during November 24th-29th, 2014.
- Workshop on Traditional Water Conservation System & Its Importance in Urban Perspective organized jointly by INTACH Raipur Chapter and School of Studies in Geology & WRM,
 Desire the Shell Hell in the Desire the interval of 20nd 24th 2014.

Pt. Ravishankar Shukla University, Raipur during August 22nd-24th, 2014.

- Prospection and Sustainable Use of Medical Plants of Chhattisgarh organized under the auspices of National Center for Natural Resources (NCNR) during September 10th-11th, 2012.
- UGC-Sponsored Workshop: How to Participate International and National Conferences, Symposia, Seminars, Workshops and Training Courses organized by UGC-Academic Staff College, Pt. Ravishankar Shukla University, Raipur during February 24th to March 2nd, 2012.
- 8. One day Workshop on Participation of Women in the Management of Water Resources, organized by Ministry of Water Resources, Central Water Commission, Bhopal, MP and Govt. Vishwanath Yadav Tamaskar PG Autonomous College, Durg, CG, on 4th March, 2009.

S.No.	Name of Awards	Organization	Year
1.	Lions Top Ten Award (Maximum marks in B.Sc.)	Lions Club Rajnandgaon City, Rajnandgaon, CG	2005
2.	Gold Medal (1 st Position in B.Sc.)	Govt. Digvijay College, Rajnandgaon, CG	2007
3.	Shri. Aasharam Ji Agrawal Award (Maximum marks in B.Sc. Biology)	Udyachal Samajik awam Sanskritik Sangathan, Rajnandagaon, CG	2007
4.	Gold Medal (1 st Position in M.Sc. Chemistry)	Govt. Digvijay College, Rajnandgaon, CG	2009
5.	Gold Medal (Maximum marks in the College)	Govt. Digvijay College, Rajnandgaon, CG	2009
6.	Shri. Aasharam Ji Agrawal Award (Merit in M.Sc. Chemistry)	Udyachal Samajik awam Sanskritik Sangathan, Rajnandagaon, CG	2009
7.	2 nd Prize in Poster competition on the occasion of National Science Day	Pt. Ravishankar Shukla University, Raipur	2014
8.	Young Scientist Award	Held at Bilaspur University, Bilaspur, organized by CG- COST	2016
9.	1 st Prize in poster competition on the occasion of National Science Day	Pt. Ravishankar Shukla University, Raipur	2016
10.	3 rd Prize in poster competition on the One day Symposium on Science, Technology and Humanity	Pt. Ravishankar Shukla University, Raipur	2016
11.	Best Poster Presentation Award in the National Seminar on advances in Environmental Sciences & Technology	Govt. Digvijay College, Rajnandgaon, CG	2016