

**Proforma for information to be provided by the Teaching/ Academic/ Research Staff**



1. **Name:** NAND LAL SINGH
2. **Designation:** Micro Analyst
3. **Academic Qualifications:**

Sr.	Degree	Institution	Year
1	B.Sc.	VBS Purvanchal University	1990
2	M.Sc.	VBS Purvanchal University	1992
3	Ph.D.	IIT(BHU)	1999

4. **Area of Specialization:**  
Waste water treatment, bioremediation, E-waste management, bio-energy & waste utilization; instrumental experiences like maintenance and operation of Atomic Absorption Spectrophotometer, Gas Chromatograph, High Performance Liquid Chromatography, CHN Analyzer, UV-Vis Spectrophotometer, Nuclear Magnetic Resonance, Fourier Transform Infrared Spectroscopy, Single Crystal XRD, Laundro-o-meter, Crock meter, Color Matching cabinet, Flammability Tester, etc.
5. **Contact Information:**  
+91 9450083618  
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6. **Projects Undertaken as PI/ Co PI:**

**Projects Ongoing:**

“Separation and Recovery of Valuable Materials from E- Waste” Sponsoring agency UP-CST (Council of Science and Technology) Lucknow.

**Projects Completed:**

1. Special Handicraft Training Programme, 2004, Sponsored by Ministry of Textiles, Government of India, New Delhi.
2. Special Handicraft Training Programme, 2005, Sponsored by Ministry of Textiles, Government of India, New Delhi.
3. Special Handicraft Training Programme, 2006, Sponsored by Ministry of Textiles, Government of India, New Delhi.
4. Solid Waste Management. N.E.A.C.’2004, Sponsored by Ministry of Environment & Forest, New Delhi
5. Environmental Awareness Programme, 2005, Sponsored by, U P Pollution Control Board, Lucknow.
6. Biodiversity Conservation, N.E.A.C., 2005, Sponsored by Ministry of Environment & Forest, New Delhi
7. Global Warming & Climate Change, N.E.A.C.’2006, Sponsored by Ministry of Environment & Forest, New Delhi

8. Biodiversity Conservation, N.E.A.C. ,2007, Sponsored by Ministry of Environment & Forest, New Delhi
9. Climate Change & Global Warming, N.E.A.C.'2008, Sponsored by Ministry of Environment & Forest, New Delhi
10. Biodiversity Conservation, N.E.A.C. ,2010, Sponsored by Ministry of Environment & Forest, New Delhi

7. Awards/ Recognitions if any:

8. **List of 10 major Publications:**

1. Biotechnology: An Emerging Tool in Realm of E- Waste Management, Recent Trends in Biological Research, ISBN:978-81-93220900, 70-80. 2017.
2. Application of TiO<sub>2</sub> Nanoparticle in Photo-catalytic Degradation of Organic Pollutants *Materials Science Forum* , Vol. 855,20-32,2016.
3. Assessment of Ground and Surface Water Quality along the River Varuna, Varanasi, India. *Environ Monit Assess* 187: 170, 2015.
4. Effect of Anatase/rutile TiO<sub>2</sub> phase composition on Arsenic adsorption, *Journal of Dispersion Science and Technology* 34(8), 1043-1052, 2013.
5. Impact of River Water Quality on the Ground Water of Varanasi District, *Indian Journal of Scientific Research*, 4(1) : 179-182, 2013.
6. Defluoridation of groundwater using natural adsorbent, *Ecology, Environment and Conservation Ecology, Environment and Conservation*. 4, 2013.
7. Kinetics studies of product inhibition in alcoholic fermentation, *Journal of Scientific and Industrial Research*, 70, 373-378, 2011.
8. Alcoholic Fermentation Technology in Early Indian Tradition, *Indian Journal of History of Science*, 45(2), 163-173, 2010.
9. Studies on Ethanol Production Using Immobilized Cells of *Kluyveromyces Thermotolerans* in a Packed Bed Reactor, *Journal of Scientific & Industrial Research* 68, 617-623, 2009.
10. Removal of Lead from Wastewater by Agricultural Waste Wheat Bran, *Indian Journal of Environ. Protection* 25(5), 390-396, 2005.

9. **Additional Information/ Achievements:**

- More than twenty three years of experience in the field of research, teaching, education planning & administration and community.
- Authored/co-authored about 33 technical papers
- Organized/participated about 50 workshops/seminar/ summer school/FDP, etc.

- Reviewer for research proposal submitted to National Centre of Science and Technology Evaluation, Ministry of Education and Science, Republic of Kazakhstan.
- Founder executive board member of Technology Business Incubator at the IIT (BHU).
- Coordinated Techno-Entrepreneurship Promotion Program, DSIR, Govt. of India
- Conducted Technology Gap Analysis for Carpet Cluster for TIFAC, DST
- Worked as founder operational Manager (Chemical) at NABL accredited Lab, IICT.
- Member, Technical Management Committee, Inspire Program, DST, organized by BHU.
- Member, Executive Board of Malviya Center for Innovation, Incubation & Entrepreneurship, IIT(BHU), Life Time Member, DIVYA PREM SEWA MISSION, Haridwar;
- Member, editorial board; *Indian Journal of Scientific Research, Aagraha , Parmita*
- General Secretary, Bharatiya Vigyan & Paryavaran Sanarakshan Samiti; The University Club, BHU, .
- Member Project Review Committee, TePP Outreach Centre, IIT (BHU).
- Mentoring IIT (BHU) students,

#### 11. **Full List of Publications:**

1. Biotechnology: An Emerging Tool in Realm of E- Waste Management, Recent Trends in Biological Research, ISBN:978-81-93220900, 70-80. 2017.
2. E-waste Management in India, National conference on Energy, Environment & its Impact on Society, January, 19-20' 2017, sponsored by Department of Higher Education, Government of Uttar Pradesh.
3. Urban Solid Waste Management: A Case Study of Varanasi City, National conference on Energy, Environment & its Impact on Society, January, 19-20' 2017, sponsored by Department of Higher Education, Government of Uttar Pradesh
4. Qualitative Assessment of River Gomati in Jaunpur District, Uttar Pradesh, National conference on Energy, Environment & its Impact on Society, January, 19-20' 2017, sponsored by Department of Higher Education, Government of Uttar Pradesh.
5. शिक्षा के वास्तविक उद्देश्य, Parmita, ISSN-0974-6129, 57, 2016.
6. Application of TiO<sub>2</sub> Nanoparticle in Photo-catalytic Degradation of Organic Pollutants *Materials Science Forum* , Vol. 855,20-32,2016.
7. The Waste to Energy: Is it Viable for Indian Cities, InSPIRE, Varanasi,2016
8. Endophytic Fungi: A Renewable source of Energy, , InSPIRE, Varanasi,2016

9. Amylase: An Overview with Special Reference to Alfa Amylase, *Journal of Global Biosciences*, Vol. 4, Special issue 1, 1886-1901, 2015.
10. Assessment of Ground and Surface Water Quality along the River Varuna, Varanasi, India. *Environ Monit Assess* 187: 170, 2015.
11. Recovery of Valuable Metals and Value Added Products from E-Waste, *Proceedings of the India International Science Festival- Young Scientists' Meet Department of Science and Technology, Government of India – Dec 4-8, 2015, Paper Waste:36*
12. Effect of Anatase/rutile TiO<sub>2</sub> phase composition on Arsenic adsorption, *Journal of Dispersion Science and Technology* 34(8), 1043-1052, 2013.
13. Impact of River Water Quality on the Ground Water of Varanasi District, *Indian Journal of Scientific Research*, 4(1) : 179-182, 2013.
14. Defluoridation of groundwater using natural adsorbent, *Ecology, Environment and Conservation Ecology, Environment and Conservation*. 4, 2013.
15. Removal of Cd (Ii) From Aqueous Solutions By Dead Biomass Of Bacillus Subtilis *Asian J. of Biochem. & Pharma. Research*, 2, (3), 140-150, 2013.
16. Water Quality of River Varuna in Varanasi City, Uttarpradesh, India, *Asian J. of Biochem. & Pharma. Research* 2 (2) ,231-240,2012.
17. रसायन विज्ञान और मानव समाज, *VIKSHA*, 151-154, 2012.
18. Kinetics studies of product inhibition in alcoholic fermentation, *Journal of Scientific and Industrial Research*, 70, 373-378, 2011.
19. Alcoholic Fermentation Technology in Early Indian Tradition, *Indian Journal of History of Science*, 45(2), 163-173, 2010.
20. Experimental-Studies on Improvement of the Performance of a Solar Water Distiller Applying Various Techniques, *International Journal of Current Trends in Science & Techchnology* 1(4), 194–206, 2010.
21. Studies on Ethanol Production Using Immobilized Cells of *Kluyveromyces Thermotolerans* in a Packed Bed Reactor, *Journal of Scientific & Industrial Research* 68, 617-623, 2009.
22. Removal of Lead from Wastewater by Agricultural Waste Wheat Bran, *Indian Journal of Environ. Protection* 25(5), 390-396, 2005.
23. Removal of Copper from Wastewater by Agricultural Waste Wheat Bran, *Indian Journal of Environ. Protection* 24(7), 499-505, 2004.
24. Detoxification of Copper Bearing Effluents using Low Cast Biosorbent Maize Bran, *Indian Journal of Environ. Protection* 24(5), 345-352, 2004.
25. Role of Biomass As An Alternate Energy Resource in Environmental Protection, *Indian Journal of Environ. Protection* 18(7), 524-531, 1998.

26. Development of hopcalite catalyst for CO oxidation at ambient conditions”, January 31-February 03, 2013, 15th CRSI-NSC & 7th CRSI-RSC Symposium.
27. Status and Challenges in Extraction and Application of Natural Dyes, page 316-329, October 20-22, 2009, International conference on *Separation Processes: Emerging Technologies for Sustainable Development*.
28. Experimental Studies on the Enhancement of the performance of a Solar Water Distiller Applying Various Techniques, page 417-427, December 18-20-2009, International Conference on Issue and Challenges in Energy Conversion & Management, Department of Mechanical Engineering, IT, BHU.
29. Eco-friendly Energy from Biomass”, N.L. Singh, January 31-February 1st, 2006, *Global Pollution: A Serious Threat to Indian Biodiversity*.
30. Biomass: A Renewable Energy Resource and Chemical Feed Stock, page 112-122, Feb. 28<sup>th</sup>-29<sup>th</sup> 2004, National Seminar, *Biomass as Source of Energy and Chemicals*.
31. “Bioceramic TiO<sub>2</sub>/PCL Nanofibre Hybrid for bone tissue Engineering” January 11-12, 2013, International Conference on Condensed Matter & Biomolecules.
32. Bioconversion of Molasses into Ethanol by Thermo tolerant Yeast” 1998. Varanasi, August 06<sup>th</sup> - 08<sup>th</sup>, 1998, National Symposia on *Chemical Engineering Education and Research: Strategy for the Future*.
33. Ethanolic Fermentation of Cane Molasses by *Saccharomyces Cerevisiae*, March, 5-7, 1997, *National Symposia on Advances in Chemical Reaction Engineering*.

Date: 17/07/2018  
Place: VARANASI



Signature