



NISHA SINGH

*Junior Research Fellow,
Department of Earth Science, IISER Kolkata*

Career Objective

To associate with Research Labs and Organizations/Institutes inculcating the perceptions of Environment on Local, National as well as Global Scale and to accept the challenges pragmatically by utilizing my education and analytical skills more meaningfully and work hard towards achieving the goals of the organization and develop personal skill and knowledge in the process.

Curriculum Project

- Dissertation work on Comet Assay for the evaluation of DNA damage in marine polychaetes from 1/08/2015 to 27/01/2016, under supervision of Dr. Baban Ingle, CSIR-National Institute of Oceanography, Dona Paula, Goa.
- 1 month industrial training from Alstom T & D India Ltd., Naini in Environment health and safety.
- Study of Water Quality of Different locality of Delhi by determining BOD, Hardness, Total Dissolved Solids & other tests.

Technical Expertise

- Electrophoresis, Centrifugation, Chromatography Techniques
- Microbial Techniques, Protein estimation and microtomy.
- DNA isolation, ELISA, Ames test, Comet assay, Oxidative stress biomarkers, SDS-PAGE and Native-PAGE; PCR, blotting techniques, FASTA, clustal W, MEGA, ArcGIS
- Soil sample- Estimation of pH, acidity, alkalinity, organic carbon, bulk density, particle density, porosity, conductivity, Chlorides, nitrates, Carbonates and moisture content.
- Water sample- Estimation of pH, temperature, turbidity, transparency, conductivity, total dissolved solid, total suspended solid, total solid, dissolved oxygen, biochemical oxygen demand, chemical oxygen demand, total acidity, total alkalinity, hardness, sodium, potassium, residual chlorine, nitrate and nitrite.
- Air sample- SPM Calculation in ambient atmosphere by using "High Volume Air Sampler", plotting and interpreting windrose.
- Solid waste- Proximate Analysis (Moisture Content, Total Solid, Total Volatile Solid and Ash Content) and Ultimate Analysis.
- Ecological population- Determination of size, density, distribution and abundance, plotting survivorship curve.

Contact



57/13 Govindpuram Colony,
COD Gate, Chaka Block, Naini, Allahabad,
Uttar Pradesh, India, Pin- 211008



+91 9172367896



[nstomar188@gmail.com](mailto:ns17rs048@iiserkol.ac.in)
ns17rs048@iiserkol.ac.in

Personal Details

Date of Birth : 18th Aug 1990
Gender : Female
Nationality : Indian
Passport No. : N8558308
Linguistic ability : English & Hindi

Educational Qualifications

M.Sc.(Tech.) in Environmental Science & Technology,
Banaras Hindu University
CGPA 8.34, 2013-2016

B.Sc. in Zoology,
SGTB Khalsa College
University of Delhi, 68.3 %, 2010-2013

Class XII (C.B.S.E) Kendriya Vidyalaya,
Dinjan Assam 69.8 % , 2009

Class X, Amy Public, Suratgarh
82%, 2007

Conference & Workshops

- Oral presentation in International conference on climate change and sustainability from 21st to 23rd Dec, 2015 on the topic marine polychaetes as proxy for pollution monitoring.
- Short term course on Clean Energy System and Technology organized by National Institute of Technology Goa, from 7th – 11th Dec, 2015.
- National seminar on ‘sustainable water management in the era of changing climate’ held on 10-11 January 2014 RGSC, BHU.
- Awareness on Spinal Cord Injuries conducted jointly by Indian Spinal Injuries center and SGTB Khalsa college on 19th Feb 2013 covering about cause, severity and the lack of awareness among people about spinal cord injuries.
- Radiation Awareness programme by Institute of Nuclear Medicine & Allied Sciences, Delhi.
- Forensic Science workshop, SGTB Khalsa Delhi.

Academic Visits

- CSIR- Central Institute of Mining & Fuel Research Dhanbad.
- Sewage treatment plant, UASB technology based in Mirzapur.
- Indian Institute of Tropical Meteorology, observation station Mirzapur.
- Excursion to Sultanpur National park for surveying migratory birds, New Delhi.
- Yamuna Biodiversity Park, Wazirabad New Delhi.
- Study on Green Building at the Campus, Teri University.
- Thermal power plant, Shriganganagar with detail knowledge of the plant, its working and the environmental scenario in the plant.

Honours & Awards

- UGC-NET-2017 Environmental Science, Roll No. 78020583, 62.86%
- GATE-Ecology and Evolution, 2017, GATE Score 526
- 1st Prize in quiz competition of annual zoological festival, SGTB Khalsa in 2011.
- Represented School at Regional Science Exhibition, KV Srikona in 2007 & 2008

Extra Co-Curricular

- Participated in Inter Department Youth Festival “DISHA 2014” organized by Rajiv Gandhi South Campus in short play, and won 2nd prize in skit.
- 1st Prize in basketball, KV Dinjan in 2008.

Publications

- Bhagat J, B S Ingole, Singh N. Glutathione S-transferase, catalase, superoxide dismutase, glutathione peroxidase, and lipid peroxidation as biomarkers of oxidative stress in snails: A review. Invertebrate Survival Journal 13: 336-349, 2016.
- Singh, N., Bhagat, J. & Ingole, B.S. Genotoxicity of two heavy metal compounds: lead nitrate and cobalt chloride in Polychaete *Perinereis cultrifera*. Environ Monit Assess (2017) 189: 308.

Extra Curriculum

- Co-ordinated in cleanliness and awareness drive under ECO1 Enviro-club, associated to registered NGO Vindhya Bachao.
- Active participation in organizing various seminars, educational trips and cultural events

Key Skills

- A keen and quick learner with Strong organizational and administrative skill
- Ability to analyse environmental Issues with an ethical point of view.
- Open to innovative ideas with ability to apply in practical situations
- Well acquainted with research laboratory environment.
- Willingness to relocate as per job demands and work in multicultural team
- Proficient verbal and written communication skills
- Fair knowledge of Computer and other communication/interaction media.