

# NIDHI S. PATIL

## Analytical Chemist

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### SUMMARY

M.sc (Analytical Chemistry) with 3.11 years of experience in Environmental Laboratory as Analytical Chemist in CSIR-NEERI, Nagpur. I am having my expertise in Instrument calibration, Analysis of Pharma Raw and Finished Products and wet analysis (physico chemical parameters of Coal, Ash, Soil, Water, wastewater quality), Method Development on HPLC with NABL documentation and good laboratory practices followed by ISO: 17025 management systems

### SKILLS

Instrument calibration, Method Development and HPLC, Wet analysis, Analysis of Raw and Finished Products, Method Transfer, GDP, GLP, Integration, Ionic Balance, Report preparation, Standard operating procedures, GMP, Root cause analysis, NABL documentation, Training, ILC/PT

### EDUCATION

M. Sc.: Chemistry (Analytical Chemistry), Institute of Science, Nagpur University Nagpur, 2017  
B.Sc.: Chemistry, Shivaji Science College, Nagpur University, 2015

### PROFESSIONAL EXPERIENCE

#### Analytical Chemist

**CSIR-National Environmental Engineering Research Institute (NEERI)**

**Water Technology and Management Division (NABL accredited and WHO collaborated center)**

**09<sup>th</sup> Nov 2017 – 22<sup>nd</sup> Oct 2021**

**Total Experience - 3.11 years**

- Broad knowledge of analytical methods of analysis and Instrumentation
- Strong in analyzing physio-chemical parameters of water samples i.e. **pH, EC, TDS, TSS, Turbidity, T.Hardness, Ca<sup>2+</sup>, Mg<sup>2+</sup>, T.A alkalinity, CO<sup>3-</sup>, HCO<sup>3-</sup>, Cl<sup>-</sup>, F<sup>-</sup>, Na<sup>+</sup>, K<sup>+</sup>, SO<sup>4</sup><sup>2-</sup>, NO<sup>3-</sup>, NO<sup>2-</sup>, PO<sup>4</sup><sup>3-</sup> and Br<sup>-</sup> as per SOP**
- Wastewater analysis i.e. **TKN, Free ammonia, Phosphorus, DO, BOD, COD, Oil & Grease**
- **Completed Awareness training program for ISO17025:2017 for the competence of testing and Calibration Laboratories**
- Hands-on experience and calibration of Instruments like **UV-Visible spectrophotometer, AAS, ICP-OES, ICP-MS, FT-IR, Karl Fischer Titrator, Fluoride meter, Turbidity meter, pH & EC meter, Flame photometer, Total Organic carbon analyzer**
- Analysis of Soil quality parameters i.e. **pH, EC, Salinity, SAR, TOC, Na<sup>+</sup>, K<sup>+</sup>, Metals**
- **Metal analysis of water, wastewater, coal, ash and cement samples**
- Chemical preparation and Standardization as per standard procedures (APHA)

- Ionic Balancing and Interpretation of WQ data
- Responsible for preparing error free reports followed by **BIS, CPCB and NGT Standards**
- Worked to acquire National Accreditation Board for Testing and Calibration Laboratories (**NABL**) accreditation from 2017-2022
- Method Development on **HPLC**
- Analysis of raw and finished products on HPLC
- Troubleshooting on HPLC
- Wet analysis including **Limit of drying (LOD), Moisture Content**
- Participated in **PT and ILC** programs
- Responsible for maintaining NABL documents for **Sample receipt and disposal data, Uncertainty, In-house Calibrations, Intermediates check, Retesting, Repeatability, Reagent preparation schedule, Breakdown of instruments, Customer feedback and maintain Environmental data**
- Maintaining current good laboratory practices in the laboratory
- **Environmental Monitoring and Sampling** for different project like Gosikhurd reservoir, Environmental study report of various lakes in Nagpur district and WTP's of various districts in Maharashtra state

## PROJECTS & PUBLICATIONS

**M. Sc. Project:** Synthesis, Characterization of Ter-polymer prepared by 2-amino thiophenol, 8-hydroxyquinoline 5-sulphonic acid and formaldehyde.

## FUNCTIONAL SKILLS

- A hard working, self-motivated individual
- Good leadership skills
- Coordination with multi-disciplinary teams
- Excellent inter-personal and communication skills
- Proven ability to implement problem solving techniques
- High degree of sample multi-tasking, responsibility, accuracy

## TECHNICAL SKILLS

- MS-CIT Certification
- Good in excel, word and power point presentation skills

## ACADEMIC ACHIVEMENTS

- Certificate of Appreciation: Facilitated for scoring highest marks at university level in merit list
- Certificate of Awareness training program for ISO 17025:2017 (General requirement for the competence of testing and Calibration laboratories)

## PERSONAL DETAILS

- Date of Birth : 20/02/1995
- Marital Status : Single
- Languages Known : English, Hindi and Marathi
- Home town : Nagpur, Maharashtra

## REFERENCES

- Dr. Leena Deshpande, Sr. Technical Officer, Water Technology and Management Division, CSIR-NEERI
- Dr. Pawan Labhasetwar, Scientist & Head, Water Technology and Management Division, CSIR-NEERI