

**Faculty Name: Prof. Vilas Navnath Nikam**

Designation: HOD

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### **BIO**

**Prof. Vilas Navnath Nikam** is a **HOD** in the **Civil Engineering** department of Sandip Polytechnic, Nasik, India. He got his Masters in Environmental Engg and pursuing PhD. in Water Resource Engineering. His research interest is in Assessment of groundwater contamination due solid waste disposal site. This includes testing of groundwater around waste disposal site at different location and classification of quality of groundwater using FWQI using fuzzy logic. His research has been disseminated in several internationally reputed journals and conferences. He has supervised many Diploma students. His interests lie in activities like trekking, playing cricket.

### **Qualification:**

1. BE (Civil Engineering)
2. M.E(Environmental Engineering)
3. PhD\* (Water Resource Engineering)

### **Paper Publications details:**

1. International Journal: 05
2. International Conference: 03
3. Book Chapter: 02
4. Article :02

## **Research Work:**

**Geopolymer Concrete:** Geopolymer concrete is simply called Cementless concrete. Geopolymer concrete consist of Sand, Aggregate, Water and Alkaline Binder. Binder material is nothing but flyash, sodium silicate and sodium hydroxide which initiate polymerization process and forms a bond which possess binding property. Geopolymer concrete is tested for compressive, flexural and split tensile strength of concrete. Geopolymer concrete possess more compressive strength than conventional cement concrete. Geopolymer concrete will be trending building material in coming future and is ecofriendly material.

**Leachate Pollution index (LPI)** - Leachate produced by landfill site and composting site at nashik waste disposal site, Nashik (Maharashtra), India. Leachate produced from landfill site had serious effects on surrounding flowing streams or nalas. Assessment of leachate is carried out by Leachate Pollution Index (LPI). LPI indicate quality of Leachate. Leachate was examined for 15 physico-chemical and 2 biological parameters during pre-monsoon and post- monsoon season (May 2019 to Nov 2019) respectively. Assessment of Seasonal variation in LPI was carried out by comparing quality of leachate for both pre-monsoon and post-monsoon season. Leachate gave higher values of LPI for pre-monsoon season as compare to Post-monsoon season. Physico-chemical and biological parameters of leachate help for effective management of Municipal solid waste in nashik city.

## **Experience:**

1. Teaching experience : 12 Years
2. Research experience : 04 Years

## **Subjects:**

1. Surveying
2. Environmental Engg
3. Theory of structure
4. Design of RCC Structure
5. Solid Waste Management