

V. P. R. P. T. P. Science College, Vallabh Vidyanagar

Add-on Certificate Courses

Course Title : Analytical Techniques : Soil Analysis
Coordinator : Dr. B. C. Dixit
Department : Chemistry
Course duration : 30 hours
Course Content :

Introduction of Chemical and Instrumental analysis. Principal and working of (i) pH meter , (ii) Conductometer, (iii) Flame photometer, (iv) Colourimetry. Basic introduction of IR, UV and NMR techniques.

Properties of soil, Analysis of soil: Measurement of pH, using pH meter, electric conductivity using conductometer, Nitrogen using colourimeter, potassium using Flame photometer, phosphorous using colourimeter. Techniques to increase fertility of soil.

Outcomes of the course :

Students will learn various analytical techniques, which will helpful in further higher studies and Quality Control Department in Industries.

Analysis of soil will be helpful in Organic Farming for farmers and in constructions industries.

Students can establish their own laboratory.

Reference Books :

(i) Instrumental Method of Chemical Analysis, by B K Sharma, 2014, Goel Publishing House.

(ii) Soil Analysis Handbook of Reference Methods, by J. Benton Jones Jr. (Editor)

(iii) Hand Book of Water, Air and Soil Analysis by Anand Dev Gupta, International E – Publication.

(iv) Vogel's Textbook of Quantitative Chemical Analysis –Vth Edition, by G H Jeffery, J Bassett, R C Denney, Longman Sci. & Tech. Publication.
