

SRI G.V.G VISALAKSHI COLLEGE FOR WOMEN

(Autonomous)

Accredited at 'A' Grade by NAAC

An ISO Certified Institution

Udumalpet

DEPARTMENT OF CHEMISTRY

"Hands on Training"

(Supported by DBT star college Scheme)

Date: 03.01.2019

Time: 9.30 to 5.00 p.m.

Venue : Chemistry Laboratory

Programme

Prayer Song : M. Mahalakshmi, III B.Sc., Chemistry

G. Balavani, III B.Sc., Chemistry

Welcome Address : Dr. M. Indrani
Assistant Professor
Department of Chemistry

TOPIC : "Soil Analysis"
Resource Person : Dr. S. Dhanakumar,
Assistant Professor,
Department of Environmental Science,
PSG College of Arts and Science,
Coimbatore-14

Vote of Thanks : Mrs. S. Umadevi
Assistant Professor in Chemistry

Convener : Dr. M. Indrani
Assistant professor in Chemistry

Organizing Committee : Mrs. M. Malarvizhi,
Assistant professor in Chemistry, HOD
Mrs. S. Umadevi,
Assistant professor in Chemistry
Mrs. R. Chitradevi
Assistant professor in Chemistry
Mrs. V. Anitha
Assistant professor in Chemistry
Dr. J. Bhuvaneswari
Assistant professor in Chemistry
Dr. E. Vaishnavi
Assistant professor in Chemistry

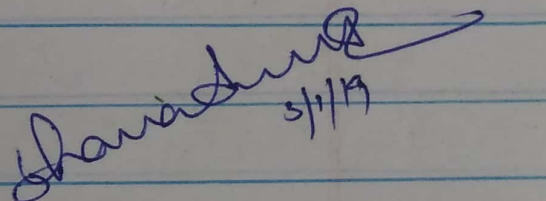
National Anthem

A hands on training was conducted on 3.11.19 in the chemistry laboratory on the topic "Soil Analysis".

Resource person : Dr. S. Dhanakumar
Assistant Professor
Dept. of Environmental
Science
P.S.G college of arts &
science
Coimbatore - 14

Soil Analysis has been used as an aid to assess the fertility of the soil. Hence the speaker trained the students to analyse some of the parameters for the soil sample.

M. Malavika
Signature of HOD


5/11/19
Signature of the Speaker



Sri GVG Visalakshi College for Women, Udumalpet
Hands on training under DBT Star College Scheme
III B.Sc. Chemistry

Title : "Soil Analysis"

Resource person: Dr. S. Dhanakumar,
Assistant Professor,
Department of Environmental Science,
PSG College of Arts and Science,
Coimbatore-14.

Date : 03.01.2019

Successful farm production starts with quality soil. The soil is one of the farmer's most important and valuable tools. It provides a reservoir of water and nutrients that is required by crops. Each type of soil has a variety of properties that cannot be changed, such as texture.

Soil analysis has been used as an aid to assess soil fertility and plant nutrient management. Achieving and maintaining appropriate levels of soil fertility, especially plant nutrient availability, is of paramount importance if agricultural land is to remain capable of sustaining crop production at an acceptable level. Soil sampling and analysis is the first of three equally important steps in managing the nutrients required by plants. Soil analysis determines the exact amount of available crop nutrients that are in the soil, including nitrogen, phosphorus, potassium, pH, humus content, available lime, and organic matter. It also provides a visible snapshot of various chemical, physical, and biological soil properties. The second is the interpretation of the analytical data leading to the third step, recommendations for nutrient additions, as fertilisers or manures, to optimise crop yields while minimising any adverse environmental impact from their application.

A quality and balanced soil leads to higher yields. Hence A farmer should collect soil samples frequently to detect any changes that could affect crop yields. Considering improvement of soil quality, it is ideal to execute an analysis of a soil sample as often as possible, especially when growing annual crops in a crop rotation.

A soil test is important for several reasons: to optimize crop production, to protect the environment from contamination by runoff and leaching of excess fertilizers, to aid in the diagnosis of plant culture problems, to improve the nutritional balance of the growing media and to save money and conserve energy by applying only the amount of fertilizer needed.

The test will also give us key information about any dangerous contaminants in the soil that could pose a danger to people, local wildlife or plant species. Some soil areas can be contaminated naturally, or from manmade sources. A quality laboratory test will show the levels of any dangerous contaminants such as, arsenic, barium, cadmium, mercury and lead. The

contaminated soil can cause damage to local water sources also. Hence, gaining knowledge on soil analysis is important and significant.

Analysis of the following Parameters done during the hands on training

- Soil pH
- Electrical conductivity
- Organic carbon
- Moisture
- Soil texture analysis
- Soil exchangeable Na, K, Ca
- Soil extractable Phosphate





Soil Analysis Hands on training 03.01.2019