

Chemical Technology and Society



Department of Chemistry Keral Verma Subharti College of Science SWAMI VIVEKANAND SUBHARTI UNIVERSITY

(Established under U.P. Govt. Act no. 29 of 2008 and approved under section 2(l) of UGC Act 1956)

Ph. 0121-2439578, 2439052, 3058031, 3056032; Telefax: 0121



Ref. No. KVSCOS/2019/ej

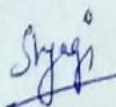
Date: 10-08-2019

NOTICE

It's to inform all students of UG and PG that the Department of Chemistry, KVSCOS introduced Value Added Course from 19/8/2019. The topics are as follows :

- Agricultural and Leather Chemistry
- Chemical Technology and Society

Interested students give their name to HOD Chemistry, KVSCOS.


Dr. Suchitra Tyagi

HOD, Chemistry Department


Registrar
Swami Vivekanand
Subharti University
MEERUT

Name of VAC Course: Chemical Technology and Society (VAC-C-007)

**KERAL VERMA SUBHARTI COLLEGE OF SCIENCE
DEPARTMENT OF CHEMISTRY**

VALUE ADDED COURSE AND ITS OBJECTIVES
Session 2019-20



Course Name: Chemical Terminology and Society
Course Code: VAC-C-007
Course Coordinator: Ms. Prachi Singhal
Designation: Assistant Professor
Contact no.- 7895224289
Duration: 7/10/2019-25/10/2019



The objective of the program

The purpose of this course is to train the students on separation techniques, understanding the chemistry of up scaling methods and biomass utilization. The students also learn about the conservation of energy.



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VALUE ADDED COURSE REGISTRATION FORM 2019-20

Session: _____
Course : _____
Year/Sem: _____
Student Name: _____
E-mail address: _____
Best mailing address: _____
Contact No: _____

Course Outcomes

- CO1 To analyze and study the properties of soil.
- CO2 Understand about fertility management.
- CO3 Know about chemistry pesticides and insecticides.
- CO4 Acquire knowledge about skin processing and polluting effects of tannery effluents.

Chemical Technology and Society

VAC-C-007

Objectives : Train the students on separation techniques, understanding the chemistry of up scaling methods and biomass utilization.

Unit I - Chemical Technology

Basic principles of distillation, solvent extraction, solid-liquid leaching and liquid-liquid extraction, separation by absorption and adsorption.

Unit II –

An introduction into the scope of different types of equipment needed in chemical technology, including reactors, distillation columns, extruders, pumps, mills, emulgators.

Unit III Scaling

up operations in chemical industry. Introduction to clean technology.

Unit IV-Society

Exploration of societal and technological issues from a chemical perspective. Chemical and scientific literacy as a means to better understand topics like air and water (and the trace materials found in them that are referred to as pollutants);

Unit –V


Energy from natural sources (i.e.solar and renewable forms), from fossil fuels and from nuclear fission; materials like plastics and polymers and their natural analogues, proteins and nucleic acids, and molecular reactivity and interconversions from simple examples like combustion to complex instances like genetic engineering and the manufacture of drugs.

Reference Book:

John W. Hill, Terry W. McCreary & Doris K. Kolb, *Chemistry for changing times* 13th Ed.

Course Outcomes

- CO1 Able to perform extraction, leaching, adsorption and adsorption methods.
- CO2 Able to use lab equipments.
- CO3 Understand the Scaling up operations and clean technology
- CO4 To create knowledge about societal issues on chemical industry.
- CO5 To know about Biomass conversion methods.


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Subhartipuram, NH-58 Delhi-Haridwar-Meerut Bypass Road,
Meerut -250005

Department of Chemistry

Report on Value Added Course

A value added course on “Chemical Technology and Society” was conducted in Chemistry department for all students, one hour per day. The course starts on 7-10-2019. The session was handled by **Ms. Prachi Singhal**, Chemistry on the need for developing awareness about the chemicals in the society. The purpose of this course is to train the students on separation techniques, understanding the chemistry of up scaling methods and biomass utilization. The students also learn about the conservation of energy. It is planned to extend this value added training in the next semester with having more expert lecture on chemical technology innovation and advanced lecture for their development.

HOD

Shyaji
(Dr. Suchita Tyagi)
(Department of Chemistry)

