

2 Days Workshop cum hands on training on Extraction and Isolation of Phytoconstituents from Medicinal Plants/Herbs/Botanicals

Herbal drugs are usually mixtures of many constituents. Since ancient time plant based products have been investigated extensively and biologically useful chemicals were isolated from them. Whenever a plant material is found to be useful, it is taken up for further investigation, as regard to constituents present for its biological activity. On confirmation of its biological activity, the suitable extracts or isolated Phytoconstituents are prepared from the plant material and put into usage. It was found in many cases the activity of the crude plant extract could be reproduced by an equivalent dose of the isolated 'active constituent'. Thus efforts are being made by individual manufacturers to improve yield, as well as composition of total extracts and also of phytoconstituents of interest, wherever desired. These requirements have led to the development of new field called Herbal Drug Extraction and Isolation. Extractions are carried out for variety of reasons: to get concentrate of actives, to purify the compounds for further processing, to isolate the compound for characterization, etc. The need for proper extraction and isolation technique is to formulate herbals into suitable dosage form, to remove unwanted material/constituents, to reduce the dose of drug /make it more potent, for evaluation and exact dose determination, for development of suitable derivatives which are more potent. Also extraction and isolation is important to separate **Phytochemical Reference Substance (PRS)**. PRS is a chemical compound reported to be present in the plant material, whose identity and purity has been conformed, may be one of the important compound present in the herb, and it may or may not be active compound. It must have high purity when tested by appropriate method. All the above requirements along with the lack of trained manpower which is needed to carry out extraction and isolation increases the problems associated with yield of active component and PRS. So, THS being an herbal/nutraceutical research laboratory which provides services from formulation development to product development form analysis to clinical trials along with regulatory services for domestic as well as international markets. We have realized the problem faced by the herbal/Ayurvedic sector and to help overcome it we have specially designed **Extraction and isolation of phytoconstituents from herbal drugs training** workshop which is 100% career oriented program for students and professionals in laboratory practices and other techniques. This program is of **two days at Total Herb Solutions Laboratory, Mumbai**. This program will help them in the practical aspect of the techniques and instruments which will help them meet the requirements of the ever growing industry. The workshop will cover practical aspects of herbal drug extraction and isolation which include preparation of samples; extraction of herbal drugs; isolation of components belonging to different chemical classes; selection of method of extraction, isolation and analysis; application of proper method of analysis etc. The candidates will be exposed to hands on experience on different extraction isolation techniques.

Objectives of the workshop

- The main purpose of the workshop is to understand the complexity of herbal drug extraction, isolation and analysis of phytoconstituents and to find out the appropriate and scientific solution for the same.
- This will help the Ayurvedic/Nutraceutical/Herbal Industry to grow faster and gain more recognition worldwide.
- It will also help candidates to master the art of extraction and isolation and understanding the complex structure of the herbal drugs/medicinal plants.

TOTAL HERB SOLUTIONS PRIVATE LIMITED

Corporate Office: Unit no. 116, 1st Floor, Cama Industrial Estate, Sun Mill Compound, Lower Parel (West), Mumbai – 400 013. INDIA.
Telephone # (91) (22) 40560400 Facsimile # (91) (22) 40560404
Email: lab@thscenter.com Website: www.thscenter.com

Who should attend?

This program is specifically designed for

- Researchers in **Pharmacognosy and Phytochemistry**, Research & Development Organizations and Planners
- **Natural Product Researchers**

- Graduate and post graduate scholars of **Botany/Chemistry and Medicinal Plants**
- **Ayurvedic, Herbal Drug, Herbal Cosmetics Industry** – R & D Managers, Q.C. Chemists, Policy Developers of Indigenous Medicine/Herbal Sector.

Benefits of attending

- The program will help in undertaking extraction, isolation and research of herbs in the right direction.
- Guidance for extraction isolation techniques of Phytoconstituents from medicinal plants/herbs/botanicals.
- Certificate of Participation.

Timetable for two days

Workshop duration	:	2 Days (8 th & 9 th August, 2014)
Morning session	:	10.00 to 10.45 Lecture cum discussion. Tea-break (15 minutes). 11.00-1.30 Demonstration/Practical, Demonstration, case study. 1.30-2.15 Lunch break
Afternoon session	:	2.15-2.45 Lecture cum discussion. Tea break 15 minutes 3.00 - 5.00 Laboratory work, Practical, Demonstration, case study.

The training is structured, designed and conducted by Dr. K. S. Laddha (ICT, Mumbai) and his team.

Course Content

Topics that will be covered during the workshop

- Extraction of Herbal Raw Material.
- Different techniques for phytochemical isolation of herbal drugs.
- Chromatographic analysis of herbal drugs (TLC/column chromatography and analysis by UV Spectrophotometry/ HPLC etc)

Practical Demonstration and hands on experience

- Demonstration and practicals of different case studies for extraction and isolation followed by analysis of the isolated component.
- Extraction and isolation or preparation of .8 Phytoconstituents from raw material to purification stage will be dealt in 2 days.
- Handouts will be provided

For further details contact: Mr. Santanu Suresh email id: santanu@thscenter.com, 02240560416, 9004600050

Cost for the 2 day program will be Rs. 3,500/- (inclusive of kit, Tea/coffee and Lunch. We also provide Jain food or snacks for people who observe fast by informing us) Prior registration is a must and payment must be made in advance.

Note: We can also provide training as per requirement of various companies/ colleges or universities etc.

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