**Date: 16/08/2024**

**Workshop Title:** Extraction and Isolation of Phytoconstituents

**Day and Date:** Saturday; 10th August, 2024 and Sunday; 11th August, 2024.

**No. of attendees:** 34

Principal K. M. Kundnani College of Pharmacy in association with Shri B. V. Patel Education Trust, Ahmedabad, Gujarat organized a 2- Day Workshop on Extraction & Isolation of Phytoconstituents.

Dr. Kirti Laddha, Professor of Pharmacognosy & Phytochemistry, Institute of Chemical Technology Mumbai, a renowned senior research scientist & an acclaimed authority on medicinal plants was the Resource person. He possesses extensive expertise in the extraction and isolation of herbal compounds, utilizing advanced techniques to maximize purity and yield. His pioneering work in optimizing extraction methods and his profound knowledge of phytochemical processes have set new standards in the field, driving significant advancements in herbal research and applications.

**About BVPT**

Shri B. V. Patel Pharmaceutical Education and Research Development Centre is situated in Ahmedabad in Gujarat state of India and they are a leader in research and innovation.

**Objective of the Workshop**

The workshop, held on 10th and 11th August, 2024 brought together 33 participants from across India, including esteemed professionals and enthusiastic researchers, to explore advanced techniques in phytochemical research. The main purpose of the workshop was to understand the complexity of herbal drug extraction, isolation and analysis, and find out the appropriate and scientific solutions for the same. They investigated the methods used to isolate ten to twelve commercially important phytoconstituents, such as Curcumin, Caffeine, Aloe-emodin, Diosgenin, and Ellagic acid, among others. The event was a resounding success, fostering a deeper understanding of phytoconstituent extraction and isolation. We extend our heartfelt gratitude to the resource persons, participants, and organizers whose dedication and expertise were instrumental in this achievement.

The Convener for the workshop was Dr. Rajani Athawale Madam, I/C Principal Prin. K. M. Kundnani College of Pharmacy. She organized and facilitated the event, ensuring a seamless flow of activities and discussions. Her expertise and dedication provided invaluable guidance and support to all participants. The co-ordinators were Dr. Swati Patil & Dr. Mandar Mulik. The co-ordinators of the workshop efficiently managed all logistical aspects, ensuring that each session ran smoothly and on schedule. Their meticulous planning and clear communication were crucial to the workshop's success. The Faculty members of the Department of Pharmacognosy Ms. Bharati Gawade, Ms. Rujuta Gandhi & Mr. Pavankumar Singh made necessary arrangements for the workshop.

The Following experiments were conducted

1. Separation of starch from refined wheat flour
2. Extraction and isolation of Curcuminoids from Turmeric
3. Extraction and isolation of Embelin from *Embelia ribes* fruits
4. Extraction and isolation of Piperine from Black pepper fruits
5. Extraction and isolation of Caffeine from Tea powder

6. Extraction and preparation of Ellagic acid from Myrobalan fruit
7. Separation of Clove oil and isolation of eugenol from clove oil
8. Separation of Cardamom oil by Clevenger apparatus
9. Synthesis of Wintergreen oil
10. Separation of Strychnine and Brucine from Nux vomica extract by column chromatography
11. Preparation of Aloe Emodin from Aloe sap containing Barbaloin
12. Extraction and Isolation of Quinine from Cinchona
13. Synthesis of 4-methyl umbelliferone (Hymecromone)
14. Extraction of Mangiferin from Mango Bark Powder
15. Extraction and Isolation of Diosgenin from Dioscorea tubers

Group photo with participants

Entire workshop team

Isolated compounds


During experimentation

Valedictory function