

Annexure 3

Recently arranged Symposium and Short Term Courses

1) National Symposium on 'Emerging Trends in Chirality, Medicinal Chemistry and Perfumery', V. G. Vaze College, Mulund East, Mumbai

Background:

Natural product based drug discovery has encountered significant challenge during the last decade. Recent natural product based lead identifying strategies have successfully and rapidly integrated rational approaches that exploit and evolve the structural diversity provided in nature. The rational approaches include the application of structure and ligand (enzyme and receptor) based computer aided drug design (CADD). This symposium had focused on recent trends in Medicinal Chemistry, Chirality and Perfumery.

It is well known that many pharmaceutical and perfumery molecules have bioactivity difference between enantiomers. Therefore, it is very important to obtain enantiomerically pure compounds. Thus, there is a growing demand for economical methods for asymmetric synthesis or kinetic resolution to obtain enantiomerically pure bioactive molecules. One section of this symposium was devoted to Chirality.

Several natural and synthetic small molecules display important olfactory property. This symposium had also discussed novel trends in perfumery field as well.

Structure of the Symposium

Eminent Researchers from many parts of India attended the symposium and delivered lectures.

Many participants including students and researchers from various Research and Teaching institutes attended the conference. This symposium had helped in further enhancement of research and teaching activities in this prominent field. Students were encouraged to present research work as poster presentation.

2) Short Term Courses during Vacation

Modern Concepts in Pharmaceutical and Chemical Industries

, V. G. Vaze College,

Report

These courses were successfully completed with enthusiastic students from Chemistry, Biotechnology, Pharma-analytical, Bio-analytical and Microbiology background from various colleges in Mumbai including some from Ratnagiri.

Through this course these students were exposed to **various aspects of Industries**. The technical as well as commercial aspects of **Natural Products, Pharmaceutical, Agrochemical, Perfumery and Cosmetic industries** were discussed. The Indian and global scenario of these Industries were discussed. The lectures also included the separation and identification techniques including instrumentation such as NMR, IR, UV, GC, HPLC, digital polarimeter etc. In perfumery lecture various plants with their odour value and their cultivation methods were discussed. In the quality control and quality assurance lecture students were also made aware of good work environment and work ethics including team work, honesty, documentation and responsibility.

Afternoon sessions consisted of practical demonstrations, which included steam distillation of essential oils, plant extraction, simple solvent distillation, vacuum distillation, fractional distillation, thin layer and column chromatography, NMR, IR, UV, GC, HPLC and digital polarimeter instruments' functioning. On the last day students were taken to Industrial R and D and quality control departments of KEVA fragrances in Mulund West, Mumbai.

This course consisted of **sixteen lectures** including **seven lectures from eminent people from industries**, seven practical sessions and **one industrial visit**. On the whole it was very interactive course. **Employment opportunities in various industries** were also discussed. Last lecture encouraged students to become entrepreneur. The lecture and practical sessions were conducted effectively. **Students gave excellent feed back at the end of course.**