

**TUMKUR UNIVERSITY
UNIVERSITY COLLEGE OF SCIENCE
DEPARTMENT OF CHEMISTRY**



**REPORT
ON
The one day UGC-CPE sponsored
skill development workshop
on
“Separation Techniques for organic
compounds/molecules”
held on
28th July 2018**

REPORT

The Department of Chemistry, University College of Science, Tumkur University, Tumakuru organized UGC-CPE sponsored one day workshop on 'Separation Techniques for organic compounds/molecules Chromatographic Techniques' on 28th July 2018 at Room No. S-122, 2nd floor, University College of Science, Tumkur University. The workshop mainly aimed at providing hands on training for first and final year B.Sc. students in order to enhancing their skills in the field of Separation techniques. This skill is one of the basic and vital components for a Bachelor's degree student in chemistry.

The inaugural session of the workshop was held at 10.00 am. The Chief Guests of the session were Dr. V V Sureshbabu, Professor, Department of Chemistry, Bangalore University, Bangalore and Dr. Manohar Shinde, Former Chairman, DOSR in Biochemistry and Co-ordinator, DOSR in Botony. Dr. Nirmala B, Department of Chemistry. Dr. Ramesh T N, HOD, University College of Science, presided over the function. 55 students from First and Final year B.Sc participated in the workshop.



The program was started with invocation by Kum. Sangeetha. The welcome address was delivered by Smt. Bhagyalakshmi M. followed by the introductory remarks on the workshop by Dr. Narendra, Department of Chemistry, UCST. The guests inaugurated the workshop by lighting the lamp. In the inaugural address, Dr. V. V. Sureshbabu stressed the importance of enhancing the skills of students to compete in today's fast changing world of technological era. He advised students to make maximum use of such skill development workshops. Prof. Manohar Shinde, emphasized on the importance of separation techniques for not only simple compounds, but to the separation of macromolecules in biochemistry. In his presidential remark, T N Ramesh, spoke about the significance of today's workshop in empowering the students skills in addition to the syllabus and its applicability to other fields of science. Smt. Savitha K R proposed vote of thanks to conclude the inaugural session.



In the first session, Prof. V V. Sureshabu, explained the fundamental principles underlying the separation of organic compounds. Different types of chromatography were illustrated with emphasis on their application to specific cases. The lecture was presented with appropriate visuals and graphics. The second session was handled by the same speaker where the instrumentation part was emphasized. It also dealt case studies of separation of a range of organic compounds (amino acids, peptides, carbohydrate and volatile fractions of petroleum products). The applications of chromatography in fields like environmental analysis, medical and clinical practices were delineated.



The post lunch session was handled by Dr. Aruna Kumar D. B of Dept. of P. G. Studies in chemistry, University College of Science, Tumkur University.

In this session, various aspects of chromatography were illustrated through animation videos. A video presentation was also made on HPLC and its usage. The students were involved in quiz activity which covered questions from the topics dealt in the workshop. After the lecture, experiments were demonstrated on chromatography especially Column chromatography and Thin layer chromatography. The Column Chromatography was used to separate the mixture of 2,4-dinitrophenylhydrazine and m-dinitrobenzene using silica gel 60-120 mesh as stationary phase and mixture of petroleum ether and ethyl acetate as mobile phase. Thin layer chromatography experiment was demonstrated for the separation of mixture of 2,4-dinitrophenylhydrazine, and m-dinitrobenzene over silica gel using the above solvent mixture for column chromatography. At the time of hands-on training, students were allowed

to conduct TLC of the mixture and identification of the spots (via UV-irradiation and iodine adsorption). The students quires were answered.

Dr. Ramesh T N proposed vote of thanks at the end of the workshop. He thanked the resource persons for their willingness to provide assistance to students to enhance their skills. He also expressed his gratitude to Principal of the college and administration of Tumkur University for providing support for the successful completion of the workshop. Student feedback was collected at the end of workshop.

Date:

HOD