

TUMKUR UNIVERSITY
UNIVERSITY COLLEGE OF SCIENCE

DEPARTMENT OF STUDIES AND RESEARCH IN CHEMISTRY

BRIEF REPORT OF THE ONE DAY SKILL DEVELOPMENT WORKSHOP ON 'SPECTROSCOPIC TECHNIQUES' ON 16TH JULY 2018

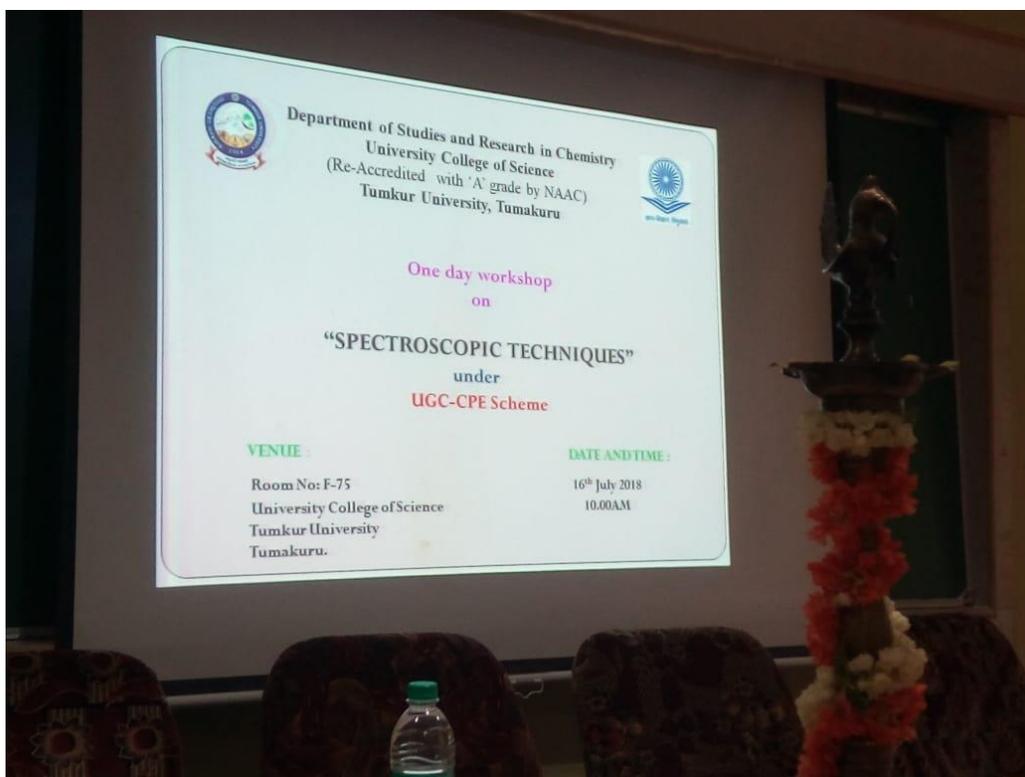
The Department of Studies and Research in Chemistry, University College of Science, Tumkur University, Tumakuru organized a one day skill development workshop on 'Spectroscopic Techniques' on 16th July 2018.

The workshop was mainly aimed at providing an opportunity for final year M.Sc. students to learn about spectroscopy through hands-on experience. As well as covering the principles of spectroscopic techniques, the activities use real-life contexts to demonstrate the applications of the techniques.

The Workshop started with a very brief inaugural programme at Sir M Vishveshwarya Auditorium at 10 am. Prof.Siddegowda, Vice Chancellor presided over the function. The program started with an invocation by Dr.Rashmi Hosmani. Dr.Narahari delivered the welcome address. In his address he welcomed all participants including the resource persons, teachers and students. Prof Siddegowda delivered the inaugural speech. He underlined the importance of organizing these kinds of workshop more often where there will be direct interaction of students with resource persons and , who are experts in their field can clear many doubts in basic concepts. Smt.Shalini B.R, Principal of the College gave the presidential remarks. After the formal inauguration, students of Chemistry department gathered in room no.75.



In the Chemistry department, a formal inauguration was organized. The Chief Guests of the session Prof.D.Channegowda, BSR faculty from Mysore University, Internal resource persons Dr.Ramesh T.N, Dr.Raghavendra Kumar P, from Tumkur University, Dr.Shetprakash M, Co-ordinator, Department of Studies and Research in Chemistry, Dr.S.Sreenivasa, Senior faculty of Department of Chemistry, Smt B.R.Shalini, Principal, University College of Science, presided over the function. Dr.Shet Prakash, Coordinator of the department gave brief introduction about the department. Dr.Sreenivasa spoke about the importance spectroscopy in research field and in identifying the synthesized molecules. Spectroscopic techniques are widely used to detect molecules, to measure the concentration of a species in solution, and to determine molecular structure. Following this, Smt.Shalini B.R, Principal of the College gave the presidential remarks.



After the presidential remarks, the session started.



The first lecture session began with the talk of Prof. Channegowda, from Department of Chemistry, University of Mysore on “NMR Spectroscopy”. He explained from the basic concepts of Nuclear Magnetic Resonance to the properties of nuclear spin systems. The limitations of simple NMR spectroscopy being of low sensitivity needing multiple scans and high resolution leading to slow speed resulted in the advent of modern Fourier Transform (FT-NMR) was beautifully put forward to the young audience .The lecture was followed by questions from the participants.





Tea break: 11:45-12:00 noon.

The session continued with same resource person on topic “Principles and Applications of Mass Spectroscopy”

This lecture was interactive from the start with many students posing questions to the speaker basic understandings of mass spectroscopy concepts like production of gas phase ions of the compound, analyser, ion detector and data system. The session ended with the lunch break at 12:40 pm.

2:30 pm: The post lunch session began.

2.30 – 3.45 pm

After the lunch, students visited C.N.R. Rao Laboratory; Dr.Raghavendra Kumar gave a brief introduction of IR and UV- Visible spectroscopy and demonstrated the working of IR and UV-Visible spectrometer.



3.55 – 4.45 pm

Hands on training session on solving Spectroscopic problems by Dr.T.N.Ramesh

The talk began with few handout problems being distributed among the students. The talk was interactive with very good students' participation in solving the spectra



The Workshop ended with feedback from students. A vote of thanks delivered by Dr. ArunaKumar D B, Assistant Professor in Chemistry.

Dr.Nirmala B, Convenor of the workshop finally thanked all the students, staff members, and non-teaching staff for their cooperation in conducting workshop successfully.

