

## **Workshop on “Molecular and Phytochemical Techniques in Drug Discovery and Development” from 17<sup>th</sup> March 2017 to 24<sup>th</sup> March 2017**

A seven day exclusively for the benefit of Staff and Research Scholars imparted knowledge on the following the themes:

- Collection, herbarium preparation, identification and authentication of plant materials;
- Extraction of plant materials;
- Biochemical analysis of the extracts;
- Qualitative analysis of secondary metabolites in extract includes phenols, tannins, flavonoids, etc.;
- Chromatography: types, applications;



One of the Staff Member receiving the certificate

- TLC and Column Chromatography - concentration of plant extracts, solvent-solvent partition chromatography, concentration of fractions, silica gel packing for column chromatography, compound isolation by Column chromatography, collection of elutions with various solvents, purification and concentration of eluted compounds;
- High performance liquid chromatography (HPLC): operations of instrument and software, quantification of phytochemicals and FT-IR spectrophotometric analysis of isolated compounds;
- DNA isolation from the plant sources;
- Amplification of different specific regions of the DNA with ITS, rbcL and mat-k markers using PCR technique; and
- Assessment of knowledge acquired.



One of the Research Scholars receiving the certificate