

Department of Pharmaceutical Chemistry

The Department of Pharmaceutical chemistry comprises of dedicated and experienced team of faculty members who actively involved in research activities. The department spread over 8,000 sq. ft. which has 10 research laboratories with sophisticated analytical equipments such as HPLC, HPTLC, SFC, DSC, GC-MS-MS, LC-MS-MS, Elemental Analyser, Combinatorial synthesizer, Catalytic Hydrogenator, Microwave synthesizer, Silicone graphic work station and several advanced softwares such as Schrödinger, V-life science etc. The department has highly experienced and qualified faculty consisting of 2 Emeritus Professors, 2 professors, 2 associate professors and 7 assistant professors.

The department lays emphasis on integrated research approach on synthesis of molecules and pharmacological evaluation. Development of analytical methods for Pharmaceutical formulations, Herbal drug analysis, standardisation of polyherbal formulations using HPLC and HPTLC, pharmacokinetics of herbal markers and herb drug interaction studies are the core areas of research activities of the department. The faculty are engaged in research and working on various research projects funded by UGC, DST, NMPB-Dept of Ayush, AICTE and various pharmaceutical industries. The department has received research grant of around Rs 4 crores.

Students have registered for Ph.D degree in the department of Pharmaceutical Chemistry and are getting stipend from various prestigious funding agencies. Faculty members of the department have published more than 350 research papers in the National and International Journals including European Journal of Medicinal Chemistry, Bioorganic and Medicinal Chemistry Letters, Letters in Drug Design & Discovery, Inflammation & Allergy-Drug Targets etc. Faculty members have also published 17 patents and 11 books.

The department of pharmaceutical chemistry with a strong faculty and modern instrument laboratory has emphasising on research in the following areas.

Major Research Areas:

- Analytical method development
- Simultaneous analysis of multi component formulations
- Bio analytical method development
- Stability studies of APIs and formulations
- Synthesis of novel anti-cancer, anti-hypertensive, anti-inflammatory, antipsychotic, anti hyperlipidaemic, antidiabetic, antidepressant molecules
- Synthesis of Prodrugs to enhance biological activity
- Designing new compounds by computer generated QSAR studies
- Herbal drug standardisation
- Herb-drug interaction studies
- Validation of traditional medicinal systems through scientific methods