

Pharmaceutical Chemistry is one of the 2 Departments at Sri Shanmugha College of Pharmacy. Masters of Pharmacy (M. Pharm) with pharmaceutical chemistry specialization was started in 2023. It is a well-established research laboratory consisting of sophisticated instruments like FTIR, HPLC etc to carry out the research activities. Pharmaceutical chemistry is by nature an interdisciplinary science, and practitioners have a strong background in organic chemistry, which must eventually be coupled with a broad understanding of biological concepts related to cellular drug targets.

- Development of new chemical entities for the treatment of cancer, diabetes, tuberculosis, inflammation, and hypertension
- Faculty members actively engage themselves in research work
- Faculty publish and present their research work in reputed national and international journals and conferences
- The program empowers students to continue to pursue higher studies and research activities.
- Pharmaceutical Chemistry department with its culture of collaborations and its focus on solutions helps the students to build a better future
- Tie-ups with other international researchers to create a new class of anticancer and antimicrobial agents
- Faculty and students have the potential and get opportunities to make discoveries that could change the world.
- To meet the requirements of pharmaceutical industries, academia, and regulatory bodies
- Practical exercises the students to get practical skills in diverse areas like analytical techniques, natural product isolation, physicochemical properties, separation techniques, drug synthesis, etc.
- Encourage seminars as part of the training program for it provides the opportunity to develop good communication and presentation skills.

### Program Outlook

Pharmaceutical Chemistry prompts many scientific disciplines and allows collaboration with researchers from other disciplines like biologists, toxicologists, pharmacologists, theoretical chemists, microbiologists, and bio-pharmacists in developing new drugs. One can place himself/herself in a very competitive position by having a strong background in organic chemistry and medicinal chemistry.

## Job Prospects

- Drug Discovery & Development (CADD)
- Organic & Medicinal Chemistry Division
- Pharmaceutical Manufacturing Division
- Pharmaceutical Bulk Drug Division
- Pharmaceutical Analytical R & D

## Skill Development

- Synthetic organic chemistry skills
- Ability to purify drugs and intermediates
- Spectroscopic techniques
- Broad understanding of biological roles of drugs
- Teamwork and interpersonal skills
- Good communication skills

A calm and pleasant imagination and sheer persistence are the most important qualities of a pharmaceutical chemist. Also they should have good written and verbal communication skills, as they are the team players in drug discovery process and frequently need to interact with scientists from other disciplines. The most encouraging and motivational factor for chemists is the fact that their work helps to improve human health and reduces sufferings.