Professor Roald Hoffman
Nobel Prize (1981) Chemistry

"*I like the idea that human beings can do anything they want to. They need to be trained sometimes. They need a teacher to awaken the intelligence within them. But to be a chemist requires no special talent. Anyone can do it, with hard work*"

Mission

The Importance of chemistry arises because so many other disciplines draw on certain chemical principles and concepts. Engineers need to know the chemical behaviour of the materials they use, Biologists need to know some chemistry in order to understand processes such as metabolism and energy conversion in organisms, people in the field of medical technology need to understand the chemical basis of the tests and analyses that they perform, pharmacists must understand the chemistry of drug reactions and interactions, nutritionists need to have some understanding of the way the body functions chemically so that they can provide the proper nutrients. So, many other fields are there where chemistry knowledge is required. *Our mission is to prepare our students for all those fields where knowledge of chemistry is required including academia*.

Programme Educational Objectives (PEOs)

The department runs three programmes. At undergraduate level, it has a six-semester degree course comprising of Inorganic, Organic, Physical and Analytical Chemistry including laboratory classes related to all of the aforementioned branches. The postgraduate course structure is of four semesters with inorganic, organic and physical specializations. In Ph. D. programme, six-month course is compulsory with major areas of natural products chemistry and nanotechnology. Therefore, the objectives are to;

- ❖ educate and train the graduate and postgraduate students in all the theoretical and experimental aspects of chemistry.
- ❖ guide and expose the students for proper handling of the equipments.
- ❖ generate critical, creative and scientific skills and encourage the students for innovations.
- ❖ prepare the students for achieving their goals towards professional life.
- ❖ enhance the academic and professional ethics among students.
- ❖ motivate them towards group activities and team work.

Programme outcomes (POs)

After having completed the chemistry courses, the students will be able to;

- ➢ Work safely, take data carefully, record relevant observations, use time effectively, assess the efficiency of experimental methods, plan for experimental work and solve problems and think like a chemist.
- ➢ Identify the problems and resolve them.

- Have good intuitive sense of chemical reactions and mechanism.
- Think independently and work in a group to develop innovative methods to meet needs of the society.
- Operate and maintain the basic instruments used for analyses.
- Transform chemistry knowledge into industrial outcomes.
- Understand the importance of chemistry in research on solid waste management, environment issues and other contemporary issues.
- Have the leadership qualities which will allow them to be able to lead in any situation and in any areas.

Programme Specific Outcomes (PSOs)

To prepare students who could pursue fruitful career they have chosen in academic or non-academic domains. The aim of running chemistry courses at different levels from Undergraduate to Ph. D. programme is to produce professionally qualified chemists who could look for better drug designing, drug delivery through nano materials, biologically active natural products, molecules with anticancer activity, innovation in solid waste management and contributing to minimize environmental hazards.