

KBN COLLEGE: DEPARTMENT OF CHEMISTRY

INDUSTRIAL VISIT REPORT

(CSIR) Hyderabad

An Industrial visit has been organized by the Department of Chemistry, KBN College, Vijayawada, for III B.Sc M.C.CS Students on 11th July, 2019 for the academic year 2019-20 to The Indian Institute of Chemical Technology is a national-level research center located in Hyderabad, Telangana, India under the Council of Scientific and Industrial Research (CSIR). IICT conducts research in basic and applied chemistry, biochemistry, bioinformatics, chemical engineering and provides science and technology inputs to the industrial and economic development of the country. It is a daylong visit, 30 students participated and three faculty members coordinated the visit.

The objective of the industrial visit is to enhance the practical stimulation and help students gain first – hand information regarding functioning of the industry, which presents the students with opportunities to plan, organize & engage in active learning experience both inside and outside the classroom.

We visited Principal Units of (CSIR).

Nuclear magnetic resonance (NMR) Unit:

The focus of our unit is the research in modern nuclear magnetic resonance (NMR). We are developing and applying modern experimental as well as computational magnetic resonance methods to create new tools to characterize physical properties of molecules, materials and Nano systems and to reliably interpret the acquired data with high accuracy using quantum-chemical calculations.

Applications include, whether your research involves to determine high resolution three dimensional structures of important biological macro-molecules at atomic resolution in solution or study biomolecular motions that are important for understanding their functions or characterize protein-protein, protein-DNA and protein-small molecule interactions or evaluate a newly synthesized small-molecule and isolated natural products or unravel underlying mechanism of biological function from molecular to atomic level then you have come to the right place. Please take

some time to explore our facility and get to know the services that we currently offer. Should you looking for an application that is not listed in our web site pleas

center synthetic aviation lubricant unit:

Lubricating oils have traditionally been one of the most attractive areas in the oil and gas value chain, but disruption is on the horizon with the rise of electrification in the transport sector.

With consistently high margins overall, lubricating oils have traditionally been one of the most attractive areas in the oil and gas value chain. However, looking ahead, we could see disruption as electrification takes hold in the transport sector. To assess what may be on the horizon, we conducted an in-depth market study and developed granular projections out to 2035. The main finding was that, while volume growth may be flattening, there is still room for value-pool expansion. This will, however, be highly variable by region, market segment, and product type, so where to play matters. This growth is also subject to some significant risks, so investors will need to keep a close eye on developments in areas such as technology and policy.

Bio Medical Research Unit:

Biomedical research is the broad area of science that looks for ways to prevent and treat diseases that cause illness and death in people and in animals. This general field of research includes many areas of both the life and physical sciences.

Utilizing biotechnology techniques, biomedical researchers study biological processes and diseases with the ultimate goal of developing effective treatments and cures. Biomedical research is an evolutionary process requiring careful experimentation by many scientists, including biologists and chemists. Discovery of new medicines and therapies requires careful scientific experimentation, development, and evaluation.

The use of animals in some types of research is essential to the development of new and more effective methods for diagnosing and treating diseases that affect both humans and animals. Scientists use animals to learn more about health problems, and to assure the safety of new medical treatments. Medical researchers need to understand health problems before they can develop ways to treat them. Some diseases and health problems involve processes that can only be studied in living organisms. Animals are necessary to medical research because it is impractical or unethical to use humans.



