

Relation between chemistry and the society.

Answer: Chemistry is everywhere, and it plays a very important role in our life. It is known to man from the day when the human discovered fire – first applied chemical reaction. Chemistry has contributed a lot towards the well being of mankind in the form of food, clothing, shelter, medical treatment and in providing entertainment facilities. A variety of chemical fertilizers are being manufactured in thousands of industries everyday. Mass production of commodities is amazing, which save people from starvation. Crops are being protected by using pesticides. Food processing factories are working day and night for preparing refined food. Steels and alloys with different properties are all miraculous products of chemistry. The production of a variety of artificial fibers has brought a revolution in our clothing. We owe colorful and fine dresses for all seasons to chemistry. Cement, iron, bricks, glass, etc. used in the construction of our houses are the result of our knowledge of chemistry. In life things are either spiritual (if they exist) or material and they are made of molecules and atoms, and that is chemistry.

But, the modern life has got another aspect as well – impact of chemistry on everyday life is increasing hence its awareness is not updated. The smoke, emitted from chimneys of chemical industries and increasing number of automobiles producing pollutant gases, is responsible for damaging our environment. Moreover, waste water coming from chemical industries is often saturated with dangerous chemicals and causes immense danger to land, canals and rivers.

In human masses chemistry has a bad image. When we talk about "chemical products" we tend to think of something contaminating or poisonous, or if we say "chemical therapy" this is linked with the treatment of cancer but not with taking an aspirin.

For the first two-thirds of the 20th century, chemistry was seen by many as the science of the future. The potential of chemical products for enriching society appeared to be unlimited. Increasingly, however, and especially in the public mind, the negative aspects of chemistry have come to the fore. Disposal of chemical by-products at waste-disposal sites of limited capacity has resulted in environmental and health problems of enormous concern. The legitimate use of drugs for the medically supervised treatment of diseases has been tainted by the growing misuse of mood-altering drugs. But chemistry isn't guilty in these consequences – humans are doing these things, and chemistry is just an instrument.

In the near future, taking into account the relationship between research in chemistry within academic institutions and the needs of industry, chemistry will take an increasing role as creator and enabler in materials science and biology, in particular learning from nature how she assembles molecules. Chemistry is going to create materials with extraordinary properties – as yet undreamed of – which will dramatically improve communications, healthcare, environmental monitoring and transport. Chemistry will stimulate and support innovation in all of the other branches of science and technology.