

What is organic chemistry?

Organic chemistry is the study of the structure, properties, composition, reactions, and preparation of carbon-containing compounds. Most organic compounds contain carbon and hydrogen, but they may also include any number of other elements (e.g., nitrogen, oxygen, halogens, phosphorus, silicon, sulfur).

Originally limited to the study of compounds produced by living organisms, organic chemistry has been broadened to include human-made substances (e.g., plastics).

What do organic chemists do?

Organic chemistry is a highly creative science that allows chemists to create and explore molecules and compounds. Organic chemists spend much of their time developing new compounds and finding better ways of synthesizing existing ones.

Where is organic chemistry used?

Organic compounds are all around us. Many modern materials are at least partially composed of organic compounds. They're central to economic growth, and are foundational to the fields of biochemistry, biotechnology, and medicine. Examples of where you can find organic compounds include agrichemicals, coatings, cosmetics, detergent, dyestuff, food, fuel, petrochemicals, pharmaceuticals, plastics, and rubber.