

Medicinal chemistry: fundamentals and nanotechnological approaches

Tatiana Da Ros

Department of Chemical and Pharmaceutical Sciences
University of Trieste

daros@units.it

“Medicinal chemistry is a chemistry-based discipline, involving aspects of biological, medical and pharmaceutical sciences. It is concerned with the invention, discovery, design, identification and preparation of biologically active compounds, the study of their metabolism, the interpretation of their mode of action at the molecular level and construction of structure-activity relationships (SAR), the relationship between chemical structure and pharmacological activity for a series of compounds.”¹

The first lesson will be dedicated to an introduction to this topic, mainly focusing on the traditional approaches for the development of useful drugs and few examples will be presented.

The second lesson will be mainly focused on new approaches toward nanomedicine and the nanotechnological approaches, based on nanoparticles, with a novel approach on this field, in which not only small molecules play an important role.

¹ International Union of Pure and Applied Chemistry (IUPAC) definition.