Carbon nanostructure: what, when, where, why, how

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In the last 20sh years the Carbon Nanostructures' (CNS) family grew and attract the attention of many researchers working in different fields. Many efforts in the studies of functionalization have been done, especially struggling with the necessity of an easy way to manipulate these structures. Solubility and orthogonal multiple functionalization are the main goals to be achieved when these materials have to be used for biological applications, as oligonucleotides vector, potential antiviral derivatives, or gene expression modulators.

In this communication, an overview of main work performed in Trieste will be presented, with special attention to the latest generations of CNS as Nanodiamonds and Graphene Quantum Dots.