

Introduction

"Buckyball, onion, nanobud, peapod – what are these buzzwords about?" was a question posed to me many times over the last decade or two. This concise glossary is designed to provide the first answer to these and similar questions, be a guide through the jungle of the jargon that has evolved in the busy field of carbon nanostructures. It provides neither a complete review of the nanocarbon field nor should it be mistaken for a textbook. The main intention is to provide useful information about keywords and explain basic concepts in nanocarbon science to all interested parties. Many entries are accompanied by references to primary literature, which I consider useful to illustrate the context; to that degree this selection is somewhat arbitrary and surely incomplete. Non-experts may appreciate the information about properties of nanocarbons and the significance of particular synthesis and characterization techniques. Experts may find good use for simple expressions and expectation values of sizes, strain energies and electronic properties of various carbon nanostructures. In order to de-mystify the field, I tried my best to simplify the terminology to a large degree, trying to make it accessible to interested individuals with little more than high-school education. I wish this intention finds approval also of those colleagues, who are used to the compact scientific shorthand notation and who may find some explanations overly simplified. As the ultimate motivation to put together this glossary, I have found that the field of carbon nanostructures is too rich in beauty and possibilities to keep it only to those who specialize in particular sub-fields as researchers.

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