

Special Issue on Carbon Chemical

Call for Papers

Carbon is the chemical element with symbol C and atomic number 6. As a member of group 14 on the periodic table, it is nonmetallic and tetravalent — making four electrons available to form covalent chemical bonds. There are three naturally occurring isotopes, with ^{12}C and ^{13}C being stable, while ^{14}C is radioactive, decaying with a half-life of about 5,730 years. Carbon is one of the few elements known since antiquity.

There are several allotropes of carbon of which the best known are graphite, diamond, and amorphous carbon. The physical properties of carbon vary widely with the allotropic form. For example, diamond is highly transparent, while graphite is opaque and black. Diamond is the hardest naturally-occurring material known, while graphite is soft enough to form a streak on paper. Diamond has a very low electrical conductivity, while graphite is a very good conductor. Under normal conditions, diamond, carbon nanotube and graphene have the highest thermal conductivities of all known materials.

All carbon allotropes are solids under normal conditions with graphite being the most thermodynamically stable form. They are chemically resistant and require high temperature to react even with oxygen. The most common oxidation state of carbon in inorganic compounds is +4, while +2 is found in carbon monoxide and other transition metal carbonyl complexes. The largest sources of inorganic carbon are limestones, dolomites and carbon dioxide, but significant quantities occur in organic deposits of coal, peat, oil and methane clathrates. Carbon forms more compounds than any other element, with almost ten million pure organic compounds described to date, which in turn are a tiny fraction of such compounds that are theoretically possible under standard conditions.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **Carbon Chemical**.

Authors should read over the journal's [Author's Guidelines](#) carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).

Please kindly notice that the “**Special Issue**” under your manuscript title is supposed to be specified and the research field “**Special Issue — Carbon Chemical**” should be chosen during your submission.

According to the following timetable:

Manuscript Due	May 10th, 2013
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Special Issue Editor

Guest Editor:

For further questions or inquiries
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