

Brooks and Taylor structure

The structure of the anisotropic spheres which precipitate from isotropic pitch during pyrolysis. The structure of the spheres consists of a lamellar arrangement of aromatic molecules in parallel layers which are perpendicular to the polar axis of the sphere and which are perpendicular to the mesophase-isotropic phase interface.

Note:

The term Brooks and Taylor structure is recommended to describe the particular lamellar morphology of the spherules most commonly precipitated from pyrolysed pitch. The term honours the workers who first recognized the significance of carbonaceous mesophase to carbon science and technology and who first defined this spherical morphology. The term Brooks and Taylor structure does not cover all structures found in the spherical mesophase, because other lamellar arrangements have been observed.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 478