

# **BUCKYBALLS**

New Allotropes (elements that exist in 2 or more forms) of C

\_3 types of C:

diamond

graphite

soot-----other spherical molecular particles have been found in it

*Buckminsterfullerene* is the newly discovered C allotrope. It has 60 C atoms arranged in pentagons and hexagons and forms a hollow cage.

It was named after Buckminster Fuller - designer of the geodesic dome.

Buckyballs are strong and rigid and behave a lot like soccer balls.

Properties:

- a. spin madly at room T
- b. when shot at a surface of 15000 mph, they rebound w/o being damaged
- c. at atm P, they are mushy, but resist very high P

Applications:

- a. replacement of C buckyballs with Si produces a semiconductor
- b. replacement of diamonds in some industrial applications
- c. invention of new lubricants, plastics, and medicine.