

Metals and their Compounds

Lecture 3.6

Point of last overheads is to emphasise that by knowing the *size* of the unit cell length, it is possible to *measure* the size of *atoms*.

The size of unit cells can be measured by experiment, involving diffraction of X-rays (see p 420 of BLB - but don't need to remember this)

Units cell sizes (and atom sizes) often given in units of Ångstroms (\AA) which is 10^{-8} cm. From these measurements we can find

- (a) size (radius) of atoms and ions
- (b) measure Avogadro's number
- (c) determine structure of crystals