surface

The boundary between two phases. It is recommended that for the purpose of surface analysis a distinction be made between 'surface' in general, 'physical surface' and 'experimental surface': Surface — The 'outer portion' of a sample of undefined depth; to be used in general discussions of the outside regions of the sample. Physical Surface — That atomic layer of a sample which, if the sample were placed in a vacuum, is the layer 'in contact with' the vacuum; the outermost atomic layer of a sample. Experimental Surface — That portion of the sample with which there is significant interaction with the particles or radiation used for excitation. It is the volume of sample required for analysis or the volume corresponding to the escape for the emitted radiation or particle, whichever is larger.

See also: interface

Source:

Orange Book, p. 251

PAC, 1979, 51, 2243 (General aspects of trace analytical methods - IV. Recommendations for nomenclature, standard procedures and reporting of experimental data for surface analysis techniques) on page 2246