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On the cover: Blown-glass light sculpture filled with an inert gas mixture and lighted with high-frequency static electricity. (Courtesy of Mundy Hepburn)

Page 2 of 3



## symmetry number

supersolubility See supersaturation.

supertransuranics [INORG CHEM] A group of relatively stable elements, with atomic numbers around 114 and mass numbers around 298, that are predicted to exist beyond the present periodic table of known elements. { |sü·pər|tranz·yu'ran·iks }

support-coated capillary column [ANALY CHEM] A capillary column that utilizes a finegranular solid support to disperse the stationary liquid. { sə'port köd əd 'kap ə,ler

suppressor [SPECT] In an analytical procedure, a substance added to the analyte to reduce the extraneous emission, absorption, or light scattering caused by the presence of an impurity. { sə'pres·ər }

suprafacial [ORG CHEM] The stereochemistry when, simultaneously, two sigma bonds are formed or broken on the same face of the component pi systems, such as in a cycloaddition reaction. { sü prə fa shəl }

supramolecular chemistry [CHEM] A highly interdisciplinary field covering the chemical, physical, and biological features of complex chemical species held together and organized by means of intermolecular (noncovalent) bonding interactions such as hydrogen bonds, van der Waals forces, and hydrophobic interactions. (,sü-promə,lek·yə·lər 'kem·ə·strē }

supramolecule [PHYS CHEM] A stable system formed by two or more molecules held together and organized by intermolecular (noncovalent bonding) interactions. { sü prə'mäl·ə,kyül )

surface chemistry [PHYS CHEM] The study and measurement of the forces and processes that act on the surfaces of fluids (gases and liquids) and solids, or at an interface separating two phases; for example, surface tension. { 'sər·fəs ˌkem·ə·strē } surface orientation [PHYS CHEM] Arrangement of molecules on the surface of a liquid

with one part of the molecule turned toward the liquid. { 'sər·fəs ˌor·ē·ən'tā·shən } surface reaction [CHEM] A chemical reaction carried out on a surface as on an adsorbent or solid catalyst. { 'sər·fəs rēˌak·shən }

suspended solids See suspension. { sə'spen·dəd 'säl·ədz }

suspension [CHEM] A mixture of fine, nonsettling particles of any solid within a liquid or gas, the particles being the dispersed phase, while the suspending medium is the continuous phase. Also known as suspended solids. { sə'spen shən }

svedberg [PHYS CHEM] A unit of sedimentation coefficient, equal to  $10^{-13}$  second. { 'sfed,barg }

Swarts reaction [ORG CHEM] The reaction of chlorinated hydrocarbons with metallic fluorides to form chlorofluorohydrocarbons, such as CCl2F2, which is quite inert and nontoxic. { 'svärts rē,ak·shən } sweat [CHEM] Exudation of nitroglycerin from dynamite due to separation of nitroglyc-

erin from its adsorbent. { swet }

sweet spirits of niter See ethyl nitrite. { 'swet 'spir-ets ev 'nī-ter}

**swep** [ORG CHEM]  $C_8H_7Cl_2NO_2$  A white, crystalline compound with a melting point of 112-114°C; insoluble in water; used as a pre- and postemergence herbicide for rice, carrots, potatoes, and cotton. Also known as methyl-N-(3,4-dichlorophenyl)carbamate. { swep }

SXAPS See soft-x-ray appearance potential spectroscopy.

sym- [ORG CHEM] A chemical prefix; denotes structure of a compound in which substituents are symmetrical with respect to a functional group or to the carbon skeleton.

symbol [CHEM] Letter or combination of letters and numbers that represent various conditions or properties of an element, for example, a normal atom, O (oxygen); with its atomic weight, <sup>16</sup>O; its atomic number, <sup>8</sup><sup>16</sup>O; as a molecule, O<sub>2</sub>; as an ion, O<sup>2+</sup>; in excited state, O\*; or as an isotope, <sup>18</sup>O. {'sim·bəl} symclosene Sæ trichlorisocyanuric acid. { 'sim·klə,zēn } symmetric top molecule [PHYS CHEM] A nonlinear molecule which has one and only

one axis of threefold or higher symmetry.  $\{sə'me\cdot trik | tap 'mäl\cdot a, kyül \}$ 

symmetry number [PHYS CHEM] The number of indistinguishable orientations that a molecule can exhibit by being rotated around symmetry axes. { 'sim·ə,trē,nəm·bər }

365

Page 3 of 3

