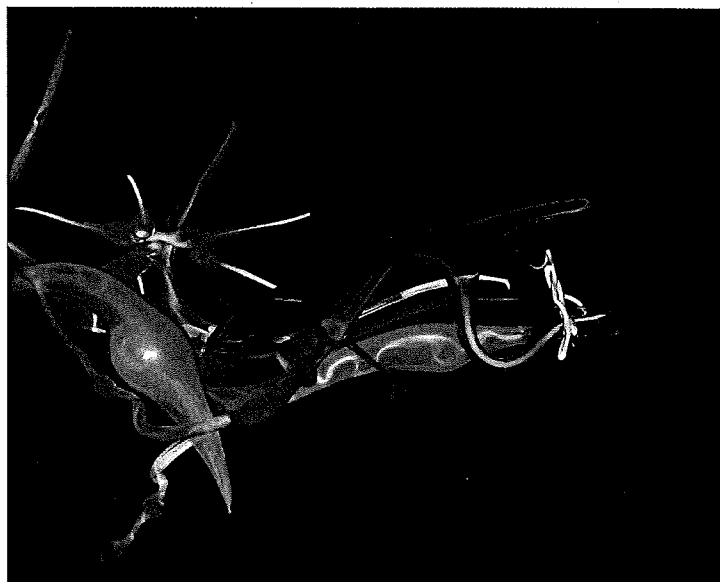


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On the cover: Blown-glass light sculpture filled with an inert gas mixture and lighted with high-frequency static electricity. (Courtesy of Mundy Hepburn)

- 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·pär, tranz·yü·'ran·iks }
- support-coated capillary column** [ANALY CHEM] A capillary column that utilizes a fine-granular solid support to disperse the stationary liquid. { sə'pört 'kōd·əd 'kap·ə, lər·ē, 'käl·əm }
- 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'fä·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·prə·mə,lek·yə·lär '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, kem·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, ör·ē·ən'tä·shən }
- surface reaction** [CHEM] A chemical reaction carried out on a surface as on an adsorbent or solid catalyst. { 'sər·fəs rē,ak·shən }
- suspended solids** *See* suspension. { sə'spen·dəd 'säl·ədʒ }
- 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,bərg }
- Swarts reaction** [ORG CHEM] The reaction of chlorinated hydrocarbons with metallic fluorides to form chlorofluorohydrocarbons, such as CCl_2F_2 , which is quite inert and nontoxic. { 'svärts rē,ak·shən }
- sweat** [CHEM] Exudation of nitroglycerin from dynamite due to separation of nitroglycerin from its adsorbent. { swet }
- sweet spirits of niter** *See* ethyl nitrite. { 'swēt 'spir·əts əv 'nī·tər }
- swep** [ORG CHEM] $\text{C}_8\text{H}_7\text{Cl}_2\text{NO}_2$ A white, crystalline compound with a melting point of $112-114^\circ\text{C}$; 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. { sim }
- 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, ^{16}O ; its atomic number, $^{8}_{16}\text{O}$; as a molecule, O_2 ; as an ion, O^{2+} ; in excited state, O^* ; or as an isotope, ^{18}O . { 'sim·bəl }
- symclosene** *See* trichloroisocyanuric acid. { 'sim·klə,zən }
- symmetric top molecule** [PHYS CHEM] A nonlinear molecule which has one and only one axis of threefold or higher symmetry. { sə'me·trik 'tāp 'mäl·ə,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 }