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On the cover: Photomicrograph of crystals of vitamin B₁. (Dennis Kunkel, University of Hawaii)



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subboundary structure [MET] A network of low-angle grain boundaries of less than one degree within the main crystals of a metal. ['səb'baün'drē 'strək'chər }

metal. [30] Smaller than the standard caliber for a gun, subcaliber [0RD] Smaller than the standard caliber for a gun, generally used in practice firing. [480 kal-0-bor] subcaliber ammunition [0RD] Ammunition used with a gun, subcaliber the usually in practice first first fire fire.

of launching tube, usually in practice firing, of a caliber smaller than the standard. { səb'kal-əbər amyə'nish-ən }

than the standard [| name | n as small guns, adapters, tubes, and accessories, used for firing subcaliber ammunition in practice drills with larger guns 'səb'kal-ə-bər i 'kwip-mənt]

subcaliber firing [ORD] Practice firing of subcaliber ammu-nition, in connection with drills in elevating, traversing, or aiming guns of larger caliber. [|səb'kal-ə-bər 'fir-in]

subcaliber gun [ORD] A gun mounted on the outside and above the tube of a larger gun; it is used in practice firing of subcaliber ammunition, in connection with aiming drills with the larger gun. ['səb'kal-ə-bər 'gən]

subcaliber mount [ORD] Special mount in or on the tube of a gun, upon which a gun of smaller caliber can be attached for practice firing. ['səb'kal'ə:bər 'maunt }

subcaliber rocket [ORD] A rocket designed especially to be fired from launching tubes of larger caliber than the rocket itself.

subcapillary interstice [GEOL] An interstice in which the molecular attraction of its walls extends across the entire opening; it is smaller than a capillary interstice. ['səb'kap-ə,lere in terstes |

subcardinal vein [VERT ZOO] Either of a pair of longitudinal veins of the mammalian embryo or the adult of some lower vertebrates which partly replace the postcardinals in the abdominal region, ventromedial to the mesonephros. [səb'kardnəl

subcarrier [COMMUN] 1. A carrier that is applied as a modulating wave to modulate another carrier. 2. See chrominance subcarrier. { |səb'kar@ər }

subcarrier oscillator [ELECTR] 1. The crystal oscillator that operates at the chrominance subcarrier or burst frequency of 3.579545 megahertz in a color television receiver; this oscillator, synchronized in frequency and phase with the transmitter master oscillator, furnishes the continuous subcarrier frequency required for demodulators in the receiver. 2. An oscillator used in a telemetering system to translate variations in an electrical quantity into variations of a frequency-modulated signal at a subcarrier frequency. ['səb'kar-ē-ər 'äs-ə,lād-ər] subcerebral plane [ANTHRO] The plane passing through a

line traversing the lower angles of the parietal bones and the juncture of the superciliary ridge and the cheek bone. [səb· sa'rē-bral 'plān l

subchannel [COMPUT SCI] The portion of an input/output channel associated with a specific input/output operation. [COMMUN] In a telemetry system, the route required to convey the magnitude of a single subcommutated measurand. (səb'chan-əl)

subclavian artery [ANAT] The proximal part of the principal artery in the arm or forelimb. ['səb'klā-vē-ən 'ard-ə-rē] subclavian vein [ANAT] The proximal part of the principal

vein in the arm or forelimb. ('səb'klā·vē·ən 'vān)

subclavius [ANAT] A small muscle attached to the clavicle and the first rib. [səb'klā·vē·əs]

subclimax [ECOL] A community immediately preceding a climax in an ecological succession. [|səb'klī,maks]

subcluster [ASTRON] One of the several distinct clumps of galaxies that often compose an irregular cluster. ['səb,kləs'

subclutter visibility [ELECTR] A measure of the effectiveness of moving-target indicator radar, equal to the ratio of the signal from a fixed target that can be canceled to the signal from a just visible moving target. { 'səb,kləd-ər ,viz-ə'bil- əd-ē }

Subcollateral [ANAT] Ventrad of the collateral sulcus of the brain. [|səb·kə'lad-ə-rəl]

subcommutation [COMMUN] In telemetry, commutation of additional channels with output applied to individual channels of the primary commutator. ['səb,käm-yə'tā-shən]

subcomponent [DES ENG] A part of a component having characteristics of the component. ['səb-kəm.pö-nənt]

Subcompound [CHEM] A compound, generally in the vapor

phase, in which an element exhibits a valency lower than that exhibited in its ordinary compounds. ['səb'kām,paund]

subconcholdal [GEOL] Pertaining to a fracture that is partly or vaguely concholdal in shape. [sob/kon/koid-ol] subconscious [PSYCH] Pertaining to mental activity beyond the level of consciousness, including the preconscious and the inconscious. (|səb'kän-shəs |

subconsequent stream See secondary consequent stream. səb'kän-sə-kwənt 'strēm |

subcontinent [GEOGR] 1. A landmass such as Greenland that is large but not as large as the generally recognized continents. 2. A large subdivision of a continent (for example, the Indian subcontinent) distinguished geologically or geomorphically from the rest of the continent. (|sab\kintan\tan) the third party by one

subcontract [ENG] A contract made with a third party by one who has contracted to perform work or service for whole or part

performance of that work or service. ['sab'kān,trakt]
subcontractor [ENG] A manufacturer or organization that
receives a contract from a prime contractor for a portion of the
work on a project. ['sab'kān,traktor']
subcritical [NUCLEO] Having an effective multiplication con-

stant less than one, so that a self-supporting chain reaction cannot be maintained in a nuclear reactor. { 'səb'krid-ə'kəl }

subcritical assembly See subcritical reactor. [sab'krid-a-kal

subcritical flow See subsonic flow. ['səb'krid-ə-kəl 'flo] subcritical mass [NUCLEO] A piece of fissionable material having an effective multiplication constant of less than one, so that it does not give rise to a self-supporting chain reaction. |səb'krid-ə-kəl 'mas |

subcritical reactor [NUCLEO] A reactor having an effective multiplication constant of less than one, so that a self-supporting chain reaction cannot be maintained. Also known as subcritical assembly; teaching reactor. { 'səb'krid-ə-kəl rē'ak-tər }

subcrop [GEOL] An occurrence of strata beneath the subsurface of an inclusive stratigraphic unit that succeeds an unconformity on which there is marked overstep. ['səb,kräp]

subcutaneous connective tissue [HISTOL] The layer of loose connective tissue beneath the dermis. [səb-kyü'tänēəs kə'nek-tiv .tish-ü }

subcutaneous emphysema [MED] The presence of air in the tissues just under the skin; when seen in diving it usually involves the skin of the neck and nearby areas. ['səb·kyü'tānē-əs .em-fə'sē-mə

subcycle generator [ELECTR] Frequency-reducing device used in telephone equipment which furnishes ringing power at a submultiple of the power supply frequency. ['səb,sī·kəl 'jena.rād·ar l

subdevice bit See select bit. ['səb·di,vīs ,bit]

subdivided capacitor [ELEC] Capacitor in which several capacitors known as sections are mounted so that they may be used individually or in combination. ['səb·di'vīd-əd kə'pas-

subdivision graph [MATH] A graph which can be obtained from a given graph by breaking up each edge into one or more segments by inserting intermediate vertices between its two

ends. ('səb'di,vizh'ən ,graf)
subdominant [ECOL] A species which may appear more abundant at particular times of the year than the true dominant in a climax; for example, in a savannah trees and shrubs are more conspicuous than the grasses, which are the true dominants. [|səb'däm-ə-nənt]

subdrainage [CIV ENG] Natural or artificial removal of water from beneath a lined conduit. ['səb'drā-nij]

subdrilling [ENG] Refers to the breaking of the base in which boreholes are drilled 1 foot (0.3 meter) or several feet below the level of the quarry floor. { səb'dril-in }

subduction [GEOL] The process by which one crustal block descends beneath another, such as the descent of the Pacific plate beneath the Andean plate along the Andean Trench. səb'dək-shən

subdural hematoma [MED] A mass of blood between the arachnoid and the dura mater. [səb'dur-əl ,hē-mə'tō-mə]

subdural hemorrhage [MED] Bleeding between the dura mater and the arachnoid. [səb'dur-əl 'hem-rij]

subdwarf star [ASTRON] An intermediate star type; luminosity is between that of main sequence stars and the white dwarf stars on the Hertzsprung-Russell diagram; spectral classes F, G, and K are most numerous. ['səb,dworf 'star]