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Fifth Edition

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1994

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Editor in Chief

McGraw-Hill, Inc.

New York San Francisco Washington, D.C.
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On the cover: Photomicrograph of crystals of vitamin B₁₂.
(Dennis Kunkel, University of Hawaii)

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**McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS,
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1 2 3 4 5 6 7 8 9 0 DOW/DOW 9 9 8 7 6 5 4 3

ISBN 0-07-042333-4

Library of Congress Cataloging-in-Publication Data

McGraw-Hill dictionary of scientific and technical terms /

Sybil P. Parker, editor in chief.—5th ed.

p. cm.

ISBN 0-07-042333-4

1. Science—Dictionaries. 2. Technology—Dictionaries.

I. Parker, Sybil P.

Q123.M34 1993

503—dc20

93-34772

CIP

INTERNATIONAL EDITION

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fluorene

colorless, nonflammable solid; soluble in water with partial decomposition; used as organic synthesis catalyst and in electroplating. { 'flū-er-ēn } [ORG CHEM] $C_{18}H_{18}O_2$ A solid, crystalline compound with a melting point of 70–71°C; used as an herbicide for vegetables, cereals, and ornamental flowers. { 'flūr-ē-nōl }

flurry [METEOROL] A brief shower of snow accompanied by a gust of wind, or a sudden, brief wind squall. { 'flər-ē }

flush [ECOL] An evergreen herbaceous or nonflowering vegetation growing in habitats where seepage water causes the surface to be constantly wet but rarely flooded. [ENG] Pertaining to separate surfaces that are on the same level. [GRAPHICS] A printing term that means no indentation; headings are often run flush left, that is, they align at the left margin; flush-right lines align at the right. { 'fləʃ }

flush bead See quirk bead. { 'fləʃ ,bēd }

flush coat [CIV ENG] A coating of bituminous material, used to waterproof a surface. { 'fləʃ ,kōt }

flush center See center-justify. { 'fləʃ 'sen-tər }

flush cover [GRAPHICS] In bookbinding, a book cover that has been trimmed to the same size as the text pages inside. { 'fləʃ 'kəv-ər }

flushed-zone resistivity [PETRO ENG] Electrical resistivity of the reservoir area which surrounds a borehole to a distance of at least 3 inches (7.6 centimeters) and for which the original interstitial fluids have been flushed out by drilling-mud filtrate. { 'fləʃt ,zōn rē-zis'tiv-əd-ē }

flush gate [CIV ENG] A gate for flushing a channel that lies below the gate of a dam. { 'fləʃ ,gāt }

flushing [CIV ENG] The removal or reduction to a permissible level of dissolved or suspended contaminants in an estuary or harbor. [ENG] Removing lodged deposits of rock fragments and other debris by water flow at high velocity; used to clean water conduits and drilled boreholes. { 'fləʃ-ŋ }

flushing oil [MATER] A solvent oil designed to remove used lubricating oil, decomposition products, and accumulated dirt from lubrication passages, crankcase surfaces, and lubricated moving parts of automotive engines. { 'fləʃ-ŋ ,ōil }

flushing period [HYD] The interval of time required for a quantity of water equal to the volume of a lake to pass through the lake outlet; computed by dividing lake volume by mean flow rate of the outlet. { 'fləʃ-ŋ ,pī-rē-əd }

flush-joint casing [PETRO ENG] Lengths of casing that when connected end to end form a smooth joint flush with the outer diameter of the remainder of the section length. { 'fləʃ 'jōint 'keɪs-ŋ }

flush left See left-justify. { 'fləʃ 'left }

flushometer [ENG] A valve that discharges a fixed quantity of water when a handle is operated; used to flush toilets and urinals. { 'fləʃ-ō-mē-tər }

flush production [PETRO ENG] First yield from a flowing oil well during its most productive period. { 'fləʃ prə-dək-'shən }

flush right See right-justify. { 'fləʃ 'raɪt }

flush tank [CIV ENG] 1. A tank in which water or sewage is retained for periodic release through a sewer. 2. A small water-filled tank for flushing a water closet. { 'fləʃ ,tæŋk }

flush valve [ENG] A valve used for flushing toilets. { 'fləʃ 'vælv }

flute [DES ENG] A groove having a curved section, especially when parallel to the main axis, as on columns, drills, and other cylindrical or conical shaped pieces. [GEOL] 1. A natural groove running vertically down the face of a rock. 2. A groove in a sedimentary structure formed by the scouring action of a turbulent, sediment-laden water current, and having a steep up-current end. { 'flūt }

flute cast [GEOL] A raised, oblong, or subconical welt on the upper surface of a siltstone or sandstone bed formed by the erosion of a flute. { 'flūt ,kɑst }

flute chucking reamer [DES ENG] A machine reamer with straight or tapered shank and with straight or spiral flutes; the ends of the teeth are ground on a slight chamfer for end cutting. { 'flūd-əd 'tʃək-ŋ ,rēm-ər }

flute coupling See stabilizer. { 'flūd-əd 'kəp-ŋ-ŋ }

flute length [DES ENG] On a twist drill, the length measured from the outside corners of the cutting lips to the farthest point on the back end of the flutes. { 'flūt ,lɛŋkθ }

flute storage [ELECTR] Ferrite storage consisting of a number of parallel lengths of fine prism-shaped tubing, each surrounding a insulated axial conductor that acts as a word line; the lengths

of tubing are intersected at right angles by parallel sets of insulated wire bit lines that are displaced slightly from the word lines; each intersection stores one bit. { 'flūt 'stōr-ŋ }

fluting [MECH ENG] A machining operation whereby flutes are formed parallel to the main axis of cylindrical or conical parts. { 'flūd-ŋ }

flutter [ACOUS] Distortion that occurs in sound reproduction as a result of undesired speed variations during the recording, duplicating, or reproducing process. [ELECTROMAG] A fast-changing variation in received signal strength, such as may be caused by antenna movements in a high wind or interaction with a signal or another frequency. [ENG] The irregular alternating motion of the parts of a relief valve due to the application of pressure where no contact is made between the valve disk and the seat. [FL MECH] aeronautical flutter. [MED] Rapid, regular contraction of the atrial muscle of the heart. { 'fləd-ər }

flutter echo [ACOUS] A multiple echo in which the reflections rapidly follow each other. [ELECTROMAG] A radar echo consisting of a rapid succession of reflected pulses resulting from a single transmitted pulse. { 'fləd-ər ,ek-ō }

flutter valve [ENG] A valve that is operated by fluctuations in pressure of the material flowing over it; used in carburetors. { 'fləd-ər ,vælv }

fluvarium [ENG] A large aquarium in which the tanks contain flowing stream water maintained by gravity, not pumps. { 'flū-ver-ē-əm }

Fluvent [GEOL] A suborder of the soil order Entisol that is well-drained with visible marks of sedimentation and no identifiable horizons; occurs in recently deposited alluvium along streams or in fans. { 'flū-vənt }

fluvial [HYD] 1. Pertaining to or produced by the action of a stream or river. 2. Existing, growing, or living in or near a river or stream. { 'flū-vē-əl }

fluvial cycle of erosion See normal cycle. { 'flū-vē-əl 'sī-kəl əv ə'rō-zhən }

fluvial deposit [GEOL] A sedimentary deposit of material transported by or suspended in a river. { 'flū-vē-əl dī-pəz-ət }

fluvial sand [GEOL] Sand laid down by a river or stream. { 'flū-vē-əl 'sænd }

fluvial soil [GEOL] Soil laid down by a river or stream. { 'flū-vē-əl 'sōil }

fluvialite [GEOL] Resulting from river action. { 'flū-vē-əl 'tīl }

fluviology [HYD] The science of rivers. { 'flū-vē-'äl-ə-jē }

fluviomorphology See river morphology. { 'flū-vē-ō-mōr'fæl-ə-jē }

flux [ELECTROMAG] The electric or magnetic lines of force in a region. [MATER] 1. In soldering, welding, and brazing, a material applied to the pieces to be united to reduce the melting point of solders and filler metals and to prevent the formation of oxides. 2. A substance used to promote the fusing of minerals or metals. 3. Additive for plastics composition to improve flow during physical processing. 4. In enamel work, a substance composed of silicates and other materials that forms a colorless, transparent glass when fired. Also known as fondant. [NUCLEO] The product of the number of particles per unit volume and their average velocity; a special case of the physics definition. Also known as flux density. [PHYS] 1. The integral over a given surface of the component of a vector field (for example, the magnetic flux density, electric displacement, or gravitational field) perpendicular to the surface; by definition, it is proportional to the number of lines of force crossing the surface. 2. The amount of some quantity flowing across a given area (often a unit area perpendicular to the flow) per unit time; the quantity may be, for example, mass or volume of fluid, electromagnetic energy, or number of particles. { 'fləks }

fluxball [ELECTROMAG] A type of magnetic test coil in which the wire is wound into the form of a solid spherical winding by combining a series of coaxial cylindrical windings of different lengths; it gives accurate values of the magnetic flux density (or its variation) at its center, even in a nonuniform magnetic field. { 'fləks ,bɒl }

flux-closure domain See closure domain. { 'fləks ,klōz-ər dō-mēn }

flux-cored welding [MET] Welding with a metal electrode that has a flux core. { 'fləks ,kɔrd 'weld-ŋ }

flux density [NUCLEO] See flux. [PHYS] Any vector field whose flux is a significant physical quantity; examples are magnetic flux density, electric displacement, gravitational field, and the Poynting vector. { 'fləks ,den-səd-ē }

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