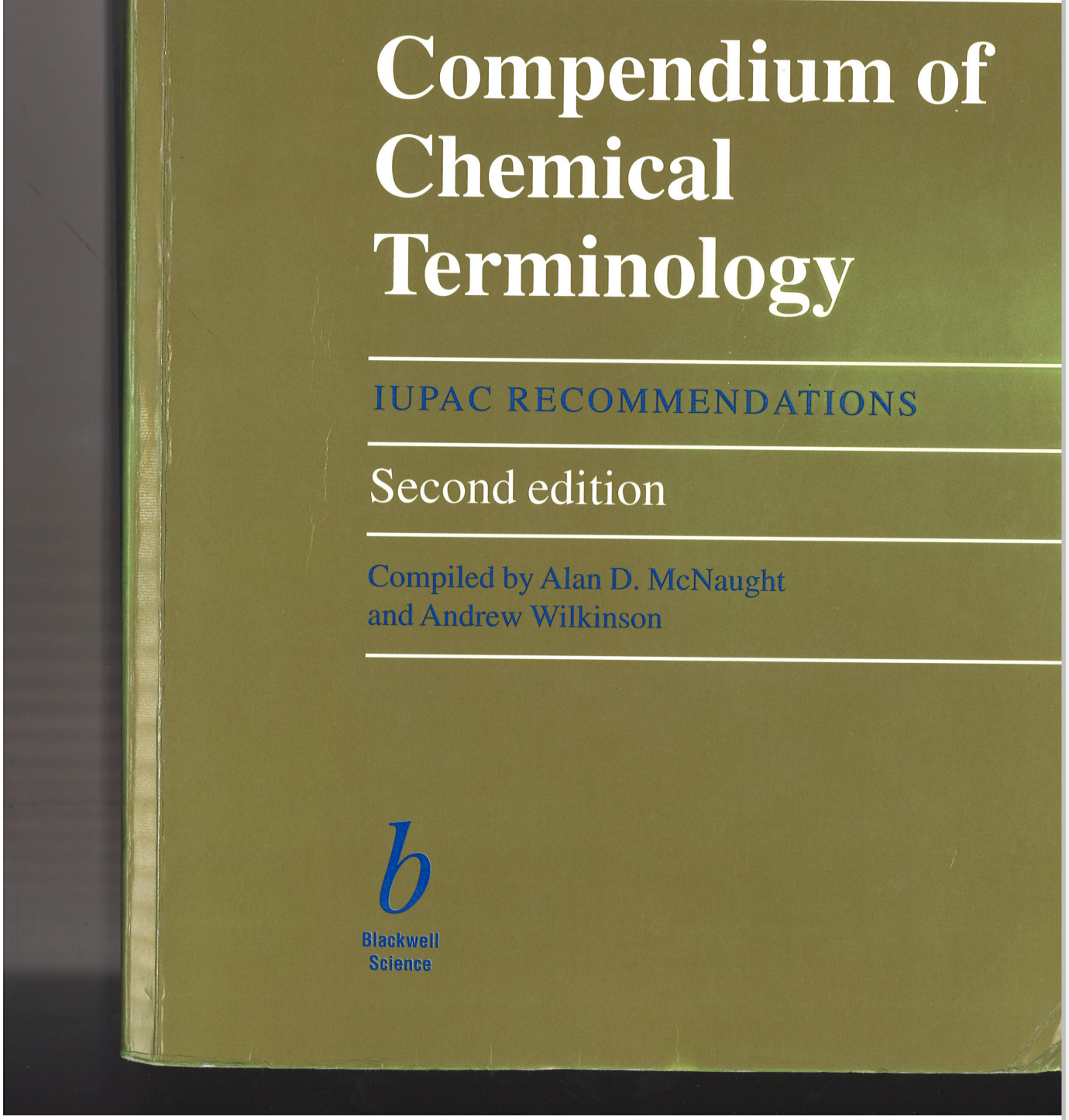

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See also *carbonium ions*.
1995, *67*, 1313

alkenes
Acyclic branched or unbranched *hydrocarbons* having one carbon–carbon double bond and the general formula C_nH_{2n}. Acyclic branched or unbranched hydrocarbons having more than one double bond are alkadienes, alkatrienes, etc.
See also *olefins*.
1995, *67*, 1313

alkoxides
Compounds, ROM, derivatives of alcohols, ROH, in which R is saturated at the site of its attachment to oxygen and M is a metal or other cationic species.
See *alcoholates*.
1995, *67*, 1314

alkoxyamines
O-Alkyl hydroxylamines (with or without substitution on N) $R'ONR_2$ ($R' \neq H$).
1995, *67*, 1314

alkylenes
1. An old term, which is not recommended, for *alkenes*, especially those of low molecular weight.
2. An old term for alkanediyl groups commonly but not necessarily having the free valencies on adjacent carbon atoms, e.g. $-CH(CH_3)CH_2-$ propylene (systematically called propane-1,2-diyl).
1995, *67*, 1314

alkyl groups
Univalent groups derived from *alkanes* by removal of a hydrogen atom from any carbon atom $-C_nH_{2n+1}$. The groups derived by removal of a hydrogen atom from a terminal carbon atom of unbranched alkanes form a subclass of normal alkyl (*n*-alkyl) groups $H[CH_2]_n$. The groups RCH_2, R_2CH ($R \neq H$), and R_3C ($R \neq H$) are primary, secondary and tertiary alkyl groups, respectively.
See also *cycloalkyl groups, hydrocarbyl groups*.
1995, *67*, 1314

alkylideneamino carbenes
See *nitrile ylides*.
1995, *67*, 1314

alkylideneaminoxyl radicals
Radicals having the structure $R_2C{=}N{-}O\cdot$. Synonymous with *iminoxyl radicals*.
1995, *67*, 1314

alkylideneaminyl radicals
Radicals having the structure $R_2C{=}N\cdot$. Synonymous with *iminyl radicals*.
1995, *67*, 1314

tion of methylene, $H_2C{:}$, e.g. $CH_3CH_2CH{:}$ propylidene.
1995, *67*, 1314

alkylidynes
Carbenes $RC{\equiv}$ containing a univalent carbon atom, e.g. $CH_3CH_2C{\equiv}$ propylidyne.
1995, *67*, 1314

alkyl radicals
Carbon-centered *radicals* derived formally by removal of one hydrogen atom from an *alkane*, e.g. $CH_3CH_2\dot{C}H_2$ propyl.
1995, *67*, 1314

alkynes
Acyclic branched or unbranched *hydrocarbons* having a carbon–carbon triple bond and the general formula C_nH_{2n-2}, $RC{\equiv}CR$. Acyclic branched or unbranched hydrocarbons having more than one triple bond are known as alkadiynes, alkatriynes, etc.
See also *acetylenes*.
1995, *67*, 1314

allele
One of several alternate forms of a *gene* which occur at the same locus on homologous *chromosomes* and which become separated during *meiosis* and can be recombined following *fusion* of gametes.
1992, *64*, 146

allenes
Hydrocarbons (and by extension, derivatives formed by substitution) having two double bonds from one carbon atom to two others $R_2C{=}C{=}CR_2$. (The simplest member, propadiene, is known as allene).
See also *cumulenes, dienes*.
1995, *67*, 1314

allo- (in amino-acid nomenclature)
Amino acids with two chiral centres were named in the past by allotting a name to the first diastereoisomer to be discovered. The second diastereoisomer, when found or synthesized, was then assigned the same name but with the prefix allo-. This method can be used only with trivial names but not with semisystematic or systematic names. It is now recommended that allo should be used only for alloisoleucine and allothreonine.
W.B. 46

allosteric enzymes
Enzymes which contain regions to which small, regulatory molecules (cf. *effector*) may bind in addition to and separate from *substrate* binding sites. On binding the effector, the catalytic activity of the enzyme towards the substrate may be enhanced, in which case

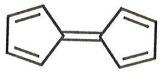
called because fulminic acid (actually $HC{\equiv}N^{+}{-}O^{-}$ formonitrile oxide) was previously considered to be HON=C:.

2. Salts of fulminic acid, e.g. $Na^{+}[-C{\equiv}N^{+}{-}O^{-}]$.

1995, *67*, 1336

fulvalenes

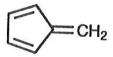
The hydrocarbon fulvalene and its derivatives formed by substitution (and by extension, analogues formed by replacement of one or more carbon atoms of the fulvalene skeleton by a heteroatom).



1995, *67*, 1336

fulvenes

The hydrocarbon fulvene and its derivatives formed by substitution (and by extension, analogues formed by replacement of one or more carbon atoms of the fulvene skeleton by a heteroatom).



1995, *67*, 1336

fume (in atmospheric chemistry)

Fine solid particles (aerosol), predominantly less than 1 μm in diameter, which result from the condensation of vapour from some types of chemical reaction. Usually this is formed from the gaseous state generally after volatilization from melted substances and often accompanied by chemical reactions such as oxidation.

1990, *62*, 2190

fumes

In popular usage, a term often taken to mean airborne effluents, unpleasant and malodorous, which might arise from chemical processes.

See also *smoke*.

1990, *62*, 2191

fumigation (in atmospheric chemistry)

An atmospheric phenomenon in which pollution, retained by an inversion layer near its level of emission, is brought rapidly to ground level as the inversion breaks up. This term also applies to the exposure of material (e.g. grain) to chemicals to kill insects, etc.

1990, *62*, 2191

functional class name

A name that expresses the characteristic group as a class term written as a separate word following the name of a parent structure or a name derived from a

of sp^{3} hybridized carbon atoms, and one or several functional groups. The functional group is an atom, or a group of atoms that has similar chemical properties whenever it occurs in different compounds. It defines the characteristic physical and chemical properties of families of organic compounds.

1994, *66*, 1116

functional parent

A structure the name of which implies the presence of one or more *characteristic groups* and which has one or more hydrogen atoms attached to at least one of its skeletal atoms or one of its characteristic groups, or in which at least one of its characteristic groups can form at least one kind of functional modification.

Note:

A parent hydride bearing a characteristic group denoted by a suffix, for example, cyclohexanol, is not considered to be a functional parent, but may be described as a 'functionalized parent hydride'.

B.B.(G) 13

fungicide

See *antimycotic*.

1993, *65*, 2015

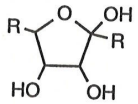
furanocoumarins

An alternative name for furocoumarins.

1995, *67*, 1336

furanoses

Cyclic hemiacetal forms of monosaccharides in which the ring is five-membered (i.e. a tetrahydrofuran skeleton).



1995, *67*, 1336

furnace black

A type of *carbon* that is produced industrially in a furnace by incomplete combustion in an adjustable and controllable process that yields a wide variety of properties within the product.

Note:

The most widely employed industrial process for *carbon black* production is the furnace process.

See also *gas black*.

1995, *67*, 490

furnace pyrolysis (in spectrochemical analysis)

A flowing stream of gas (hydrogen, oxygen, nitrogen, chlorine, etc.) required to produce volatile species of the elements being determined, is passed over the *test sample* in a heated furnace. The analytes leave the