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# CORRECTIONS TO *A GUIDE TO IUPAC NOMENCLATURE OF ORGANIC COMPOUNDS (IUPAC RECOMMENDATIONS 1993)*

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# Corrections to *A Guide to IUPAC Nomenclature of Organic Compounds (IUPAC Recommendations 1993)*

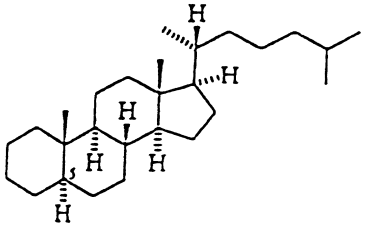
Among the names and structures used as examples in the 1993 *Guide to IUPAC Nomenclature of Organic Compounds* [1] (*Guide*) some errors [2] appear, several of which are likely to be quickly obvious and untroublesome. To reduce the possibility of confusion among users of the *Guide*, however, we publish a list of corrections here rather than waiting until a new edition of the *Guide* has been prepared. Access to the on-line edition of the *Guide* is available from <http://www.iupac.org/recommendations/1999/1707favre/index.html> or see ref. [3]. The formula in this list that is intended to specify stereochemical information is drawn in the style recommended in the 1996 publication 'Basic Terminology of Stereochemistry' [4].

Page 2, R-0.1.3.1, second example: Close up *a*,*j* within brackets.

Page 8, footnote 5: Insert space after second 'i'-.

Page 9, line 13 [R-0.1.7.1(c)]: Change first 1,3,5,7-tetraoxocane to 1,3,5,7-tetroxocane.

Page 18, Change formula for 5α-cholestane to



Page 19, Table 1, name for structure 5: Close up space after ] in 1-Azabicyclo[2.2.2]octane-2-carboxylic acid.

Page 24, bottom right formula: Add H with broken wedge bond at position 9.

Page 30, R-1.2.6.1, line 5: Replace γ (gamma) by ξ (xi).

Page 31, R-1.2.7.1, line 3: Change prefix to read *x(y→z)abeo*.

Page 31, bottom left formula: Move broken wedge bond and H from position 5 to position 6; change prefix in name to read 10(5→6)*abeo* (i.e. no spaces).

Page 33, third example: Capitalize first c in name.

Page 39, R-2.3.1.2, line 2: Change second formula to $C_nH_{n+1}$,

Page 42, Table 4, footnote b, line 2: Change Table 1 to Table 3.

Page 43, explanation under top right formula: Change 1,5,4 to 1,4,5 in next-to-last line.

Page 45, footnote 26: Change name to 7*H*-benzocyclononene and change A-21.5 to A-21.4.

Page 46, name for top right example: Insert comma between locants 1′ and 2′ within last square brackets.

Page 46, R-2.4.1.2, first example: Insert additional bond line between positions 4a and 9a.

Page 49, R-2.4.1.4.1, line 4: Change R-2.3.3.3 to R-2.3.3.1.

Page 52, name for third formula (middle of page): Replace comma within square brackets by period.

Page 56, top left formula (Abietane): Replace H at the end of wedge bond line from position 10 by locant number 20.

Page 58, line 4: Delete furfuryl, and thenyl.

Page 61, formulas for Cholesterol and 7,8-Didehydrocholesterol: Delete H and broken wedge line at position 5.

Page 61, footnote 42, line 1: Change locants in name to 3,4,5,6 and 2*H*.

Page 62, R-3.1.4, formula for hepta-1,6-diene-3,5-diyl: Delete subscript 2 at position 3.

Page 63, Table 5, Alcohols and Phenols entry: For suffix read -ol.

Page 66, Table 8, Isocyano- entry: Change Replacing atom(s) to –NC.

Page 67, last name: Capitalize p of phenyl.

Page 71, line 4 following heading *Examples:* Change three to two.

Page 75, line 2 of text: Replace $–CH_2–COOH$ by $–[CH_2]_2–COOH$.

Page 78, R-5.1.3.1, second name under heterocyclic formula: Change -dihyro- to -dihydro-; change (R-2.3.3.3) to (R-2.3.3.1).

Page 80, line 4: Change R-2.3.3.2 to R-2.3.3.3.

Page 84, name of last example: Capitalize first letter (c).

Page 85, second formula: Reverse numbering in benzene ring (i.e. $–SO_2–OH$ has locant 1).

Page 85, R-5.3.3.1, first name for last formula: Change to (2-Anthryl)[7-(phenyldiazenyl)-2-naphthyl]diazene.

Page 88, R-5.4.1, names for fourth example: Move second square bracket in (a) and (c). (a) [1,1′-Binaphthalene]-3,3′,4,4′-tetrayltetrakis(azane); (c) [1,1′-Binaphthalene]-3,3′,4,4′-tetrayl-tetraamine.

Page 90, R-5.4.3, second example, second name: Change dash to hyphen.

Page 90, R-5.4.4, line 2: Change dashes (after *N* and *O*) to hyphens.

Page 94, R-5.5.3, example on right: Add reference (R-5.5.4.2) after second name.

Page 98, R-5.5.7, last two examples, second names: Insert 1*H*- before $1\lambda^4$ and 5*H*- before $5\lambda^6$, respectively.

Page 105, R-5.6.6.3, name for second example: Delete ( ) and close up.

Page 106, R-5.6.6.4, fourth example, first name: Insert ( ) around Propan-2-ylidene.

Page 111, Table 13, third column: Change -dithoic to -dithioic.

Page 116, Table 15, second column, fifth name: Change dash to hyphen.

Page 120, R-5.7.5.1, second example, first name: Change locants 4,6 to 2,10.

Page 120, R-5.7.5.1, last example, second name: Change R-2.4.4.1 to R-2.4.1.1.

Page 121, R-5.7.5.3, second example, first name: Final character is letter l, not numeral 1.

Page 129, line 1 after first two examples: Change hydrazides to hydrazine.

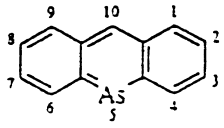
Page 133, R-5.8.1.2, top right example, second formula: Delete one $CH_2$ group.

Page 141, R-5.8.4, first example: Delete first bond line and close up to leave $(CH_3)_3N^+–N^–CH_3$.

Page 154, top, formula for rotenone: Change locant 5 to 5′.

Page 166, Table 21, formula for cubane: Interchange locants 4 and 8.

Page 166, Table 23, formula for acridarsine: Change numbering to




and delete An exception to.

Page 170, second column: Change Phenothiarsine to Phenothiarsinine, Phenoxantimonine to Phenoxastibinine, Phenoxarsine to Phenoxarsinine, and Phenoxaphosphine to Phenoxaphosphinine.

Page 175, Table 28, formula for terephthalic acid: Change numbering to assign locants 1 and 4 to the substituted positions.

Page 177, Table 29, formula for rhodanine: Replace S= at position 4 by O=.

Page 179, Table 31, formula for formazan: Reverse the order of locants (i.e. $NH_2$ is 5).

Page 180, bottom left example: Change locant 3 in formula to 2, delete [1,3] from name, and add after name, ([1,2] is implied).

Index:

Amides—Change 175 to 63, 125–127, 175, 176.

Amines—Change 125–127 to 63, 87–89.

Amino—Add 74 and 88.

Aminocarbonyl—Delete this entry entirely.

Amminium—Change to Ammonium.

Cyclo—Change 38 to 39.

Methylene—Add 163.

*After* Nitriles—Add Nitrilo 33

Phosphorus—Change tetravalent to trivalent

Prefixes, detachable—Change 19 to 10.

Radicofunctional name—Add 14 and 25.

Replacement nomenclature—Change 51 to 15, 23, 43.

Selanyl—Add 102.

*Under* Seniority—Add of classes of compounds 70.

Thio—Delete 91.

-thiol—Change 91 to 92, 93.

## REFERENCES

1 International Union of Pure Applied Chemistry. Division of Organic Chemistry. Commission on Nomenclature of Organic Chemistry. *A Guide to IUPAC Nomenclature of Organic Compounds, Recommendations 1993* (R. Panico, W. H. Powell, J.-C. Richer, eds). Blackwell Scientific Publications, Oxford, UK (1993).

2 A substantial number of these errors were discerned during the preparation of a German translation of the *Guide*: *Nomenklatur der Organischen Chemie—Eine Einführung* (G. Kruse, ed.). VCH, Weinheim, Germany (1997). We are grateful to Gerlinde Kruse for alerting us to these errors.

3 For Europe <http://www.acdlabs.co.uk/iupac/nomenclature/> and for America <http://www.acdlabs.com/iupac/nomenclature/>.

4 International Union of Pure Applied Chemistry. Division of Organic Chemistry. Commission on Nomenclature of Organic Chemistry (G. P. Moss, ed.). Basic terminology of stereochemistry (IUPAC Recommendations 1996). *Pure Appl. Chem.* **68**, 2193–2222 (1996).