

ACS Committee on Nomenclature, Annual Report, 1979

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Nomenclature committees, both national and international, were very active in 1979, resulting in substantial progress in many different fields. The more important meetings and accomplishments are summarized.

1. The ACS Committee on Nomenclature held its annual meeting at CAS in November. Progress of the work of the divisional committees and international commissions was reviewed. In addition, ways of working more closely with the ACS Divisions, journal editors, and authors as well as general means of promoting good nomenclature were explored. The Committee succeeded in establishing contact with the editors of handbooks with the aim of having the nomenclature sections and references in these books brought up to date. Feasibility studies on compiling an authoritative chemical dictionary and on producing a teaching film or other visual aids on chemical nomenclature are continuing. A subcommittee to deal with chemical pronunciation has been established. Because of the decision of the *Journal of Chemical Education* to discontinue publication of the "Notes on Nomenclature" column, alternate ways of communicating with the chemical public are being studied. For the first time, four Associates to the Committee were appointed by the ACS President.

2. The IUPAC Interdivisional Committee on Nomenclature and Symbols (IDCNS) functioned effectively this year. It held its annual meeting in Davos, Switzerland, in September. In addition to the IUPAC publications listed in the Appendix, specific documents in process and thus not yet recorded in the Appendix deal with the following topics: terminology of thermal analysis and thermogravimetry, fermentation technology, electrode reaction orders, straightforward transformations, X-ray emission spectroscopy, transport phenomena, kinetic methods of analysis, abbreviations in the chemical literature, and a glossary of nuclear terms.

3. The IUPAC Inorganic Nomenclature Commission met in August in Davos. Topics under discussion included ions and radicals, boron compounds, inorganic hydrides, cluster compounds, ligand locants, heteropoly acids and anions, coordination names for nonmetal compounds, chains and rings, inorganic polymers, stereochemical designations for coordination compounds, and revision of the Red Book. Recommendations dealing with the names of elements beyond 100 and isotopically modified inorganic compounds were published in 1979 (see Appendix).

4. The IUPAC Organic Nomenclature Commission met in August in Davos. The Commission continued its study of the reorganization and revision of the present rules according to a more logical arrangement (Section R) and of a more drastic long-range approach (Section G). Recommendations dealing with the naming of isotopically modified organic compounds and the revision of the Hantzsch-Widman system of nomenclature for heteromonocycles were issued during 1979 (see Appendix). Also published was the compendium of present IUPAC organic nomenclature rules (Sections A-F and H). Work on revisions and extensions of the stereochemistry rules is continuing. A publication on nodal nomenclature by Lozac'h, Powell, and Goodson has just appeared (see Appendix).

5. The IUPAC Macromolecular Nomenclature Commission met in September in Davos. The Commission is continuing its work on (a) nomenclature and symbolism of copolymers, (b) subsidiary definitions of terms relating to polymers, (c) definitions for physical properties of polymers, (d) substitutive nomenclature for reacted polymers, (e) nomenclature of inorganic polymers, (f) classification and family names of polymers, and (g) interpenetrating polymer networks. Of these items (a), (e), and (f) are at the most advanced stage with recommendations expected to be issued in 1980. Recommendations dealing with stereochemical definitions and notations relating to polymers were issued in 1979 (see Appendix).

6. In biochemical nomenclature both JCBN and NC-IUB met jointly in Killarney, Ireland, in June. Documents published in 1979 include the new edition of "Enzyme Nomenclature", tetrapyrrole nomenclature, and the nomenclature of iron-sulfur proteins (see Appendix). Work is progressing on recommendations for the nomenclature of prostaglandins (Joy Merritt is doing the spadework), carbohydrates, vitamins, enzyme kinetics, catecholamines, diterpenes, glycoproteins, and other specialized topics.

7. All ACS divisional nomenclature committees were active in 1979 to varying degrees. These are the ones of the Division of Analytical Chemistry, Division of Carbohydrate Chemistry, Division of Fluorine Chemistry, Division of Inorganic Chemistry, Division of Organic Chemistry, Division of Physical Chemistry, and Division of Polymer Chemistry.

8. The Office of Biochemical Nomenclature continues to operate. Close liaison between it and the Nomenclature Division of CAS is being maintained.

The Chairman of the Committee is CAS Director of Nomenclature and, through these combined offices, maintains close liaison between ACS nomenclature committees, CAS, and other organizations. During 1979 cooperation with outside organizations continued to be substantial. In the area of drug and pesticide names considerable contributions were made to the USAN (U.S. Adopted Names) program of the American Medical Association, the INN (International Nonproprietary Names) program of the World Health Organization, the American National Standards Institute, and the International Standards Organization. We now cooperate or provide services in the nomenclature field to the following organizations.

American Chemical Society
American Institute of Nutrition
American Medical Association
American National Standards Institute
American Pharmaceutical Association
American Society of Hospital Pharmacists
British Crop Protection Council
British Pharmacopoeia
British Veterinary Codex Committee
Canada Department of Agriculture

Canadian Standards Association
 Drug Enforcement Association
 Food and Agricultural Organization
 Food and Drug Administration
 International Standards Organization
 International Union of Biochemistry
 International Union of Crystallography
 International Union of Nutritional Sciences
 International Union of Pure and Applied Chemistry
 National Cancer Institute
 National Institutes of Health
 National Library of Medicine
 National Research Council
 U.S. Department of Agriculture
 U.S. Department of the Army
 U.S. Pharmacopeia
 World Health Organization

In addition, correspondence with individual authors and editors was processed regularly. CAS continues to be the headquarters for the distribution of nomenclature pamphlets and other nomenclature information.

APPENDIX. OFFICIAL NOMENCLATURE PUBLICATIONS 1979

IUPAC

Analytical Chemistry Division. Commission of Microchemical Techniques and Trace Analysis: "General aspects of trace analytical methods. IV. Recommendations for nomenclature, standard procedures and reporting of experimental data for surface analysis techniques".

Pure Appl. Chem. **1979**, 51(11), 2243-50.

Analytical Chemistry Division. Commission on Analytical Reactions and Reagents: "Recommendations for presentation of data on compleximetric indicators. I. General".

Pure Appl. Chem. **1979**, 51(6), 1357-65.

Analytical Chemistry Division. Commission on Electroanalytical Chemistry: "Recommended terms, symbols and definitions for electroanalytical chemistry".

Pure Appl. Chem. **1979**, 51(5), 1159-74.

Analytical Chemistry Division. Commission on Analytical Nomenclature: "Recommended nomenclature for scales of working in analysis".

Pure Appl. Chem. **1979**, 51(1), 43-7.

Clinical Chemistry Section. Commission on Quantities and Units in Clinical Chemistry: "Quantities and units in clinical chemistry".

Pure Appl. Chem. **1979**, 51(12), 2451-80.

Clinical Chemistry Section. Commission on Quantities and Units in Clinical Chemistry: "List of quantities in clinical chemistry".

Pure Appl. Chem. **1979**, 51(12), 2481-2502.

Clinical Chemistry Section. Commission on Automation: "Characteristics and attributes of instruments intended for automated analysis in clinical chemistry".

IUPAC Inf. Bull., **1978**, No. 3, 233-40.

Clinical Chemistry Section. Commission on Quantities and Units, and the IFCC Expert Panel on Quantities and Units: "Quantities and units in clinical chemistry. Optical spectroscopy: Part I. Theoretical outline and general quantities" (Provisional recommendations 1978).

IUPAC Inf. Bull., **1978**, No. 3, 241-60.

Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry: "Nomenclature of inorganic boron compounds".

Kem. Kozl. **1979**, 51, 407-30 (Hungarian version).

Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry: "Nomenclature of inorganic chemistry". D. Purdela.

Publication of the Academy of the Socialistic Republic of Romania, Bucharest, 1977, 153 pp. (Romanian version). Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry: "Recommendations for the naming of elements of atomic numbers greater than 100".

Pure Appl. Chem. **1979**, 51(2), 381-4.

Inorganic Chemistry Division. Commission on Atomic Weights, "Atomic weights of the elements 1977".

Pure Appl. Chem. **1979**, 51(2), 405-33.

Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry, "Nomenclature of inorganic chemistry. 12. Isotopically modified compounds".

Pure Appl. Chem. **1979**, 51(9), 1981-94.

Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry: "Nomenclature of hydrides of nitrogen and derived cations, anions and ligands".

Bull. Soc. Chim. Belg. **1978**, 87(11-12), I-XI.

Macromolecular Chemistry Division. Commission on Macromolecular Nomenclature: "Stereochemical definitions and notations relating to polymers".

Pure Appl. Chem. **1979**, 51(5), 1101-21.

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Revision of the extended Hantzsch-Widman system of nomenclature for heteromonocycles".

Pure Appl. Chem. **1979**, 51(9), 1995-2003.

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Nomenclature of organic chemistry. Section H. Isotopically modified compounds". First edition.

Pure Appl. Chem. **1979**, 51(2), 353-80.

Organic Chemistry Division. Commission of Physical Organic Chemistry: "Glossary of terms used in physical organic chemistry".

Pure Appl. Chem. **1979**, 51(8), 1725-1801.

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Nomenclature of organic chemistry. Sections A-F and H". 1979 Edition.

Pergamon Press, New York, 1979, 559 pp.

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Nomenclature of organic chemistry. Definitive rules for Section A. Hydrocarbons. Section B. Fundamental heterocyclic systems". Third edition, 1971.

Państwowe Wydawnictwo Naukowe, Warsaw, 1978, 88 pp. (Polish version).

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Nomenclature of organic chemistry. Definitive rules for Section C. Characteristic groups containing carbon, hydrogen, nitrogen, halogen, sulfur, selenium and/or tellurium". Second edition, 1971.

Państwowe Wydawnictwo Naukowe, Warsaw, 1979, 273 pp. (Polish version).

Organic Chemistry Division. Commission on Nomenclature of Organic Chemistry: "Nomenclature of organic chemistry. Section E. Stereochemistry". (Recommendations 1974).

Państwowe Wydawnictwo Naukowe, Warsaw, 1979, 48 pp. (Polish version).

Physical Chemistry Division. Commission on Thermodynamics, "Manual of symbols and terminology for physicochemical quantities and units. Appendix IV: Notation for states and processes, significance of the word standard in chemical thermodynamics, and remarks on functions used in thermodynamic tables".

Pure Appl. Chem. **1979**, 51(2), 393-403.

Physical Chemistry Division. Commission on Colloid and Surface Chemistry: "Chemical nomenclature and formulation of compositions of synthetic and natural zeolites".

Pure Appl. Chem. **1979**, 51(5), 1091-1100.

Physical Chemistry Division. Commission on Colloid and Surface Chemistry: "Reporting experimental data dealing

with critical micellization concentrations (cmc's) of aqueous surfactant systems".

Pure Appl. Chem. **1979**, 51(5), 1083-89.

Physical Chemistry Division. Commission on Symbols, Terminology and Units: "Manual of symbols and terminology for physicochemical quantities and units".

Pure Appl. Chem. **1979**, 51(1), 1-41.

Physical Chemistry Division. Commission on Molecular Structure and Spectroscopy: "Recommendations for symbolism and nomenclature for mass spectroscopy".

Int. J. Mass Spectrom. Ion Phys. **1979**, 29(4), 392-8.

Physical Chemistry Division. Commission on Colloid and Surface Chemistry: "Terminology and symbols in colloid and surface chemistry. Part 1.13. Definitions, terminology and symbols for rheological properties".

Pure Appl. Chem. **1979**, 51(5), 1213-18.

Physical Chemistry Division. Commission on Molecular Structure and Spectroscopy: "Definitions and symbolism of molecular force constants".

Pure Appl. Chem. **1978**, 50(11-12), 1707-13.

IUPAC-IUB

Commission on Biochemical Nomenclature: "Abbreviations and symbols for description of conformation of polypeptide chains" (Rules approved 1974).

Chem. Listy **1979**, 73(9), 951-64 (Czech version).

Commission on Biochemical Nomenclature: "Nomenclature of phosphorus-containing compounds of biochemical importance" (Recommendations 1976).

Mol. Cell. Biochem. **1978**, 21(3), 184-92.

Commission on Biochemical Nomenclature: "Nomenclature of phosphorus-containing compounds of biochemical importance" (Recommendations 1976). Corrections.

Chem. Phys. Lipids **1979**, 23(1), 91.

Commission on Biochemical Nomenclature: "Nomenclature of cyclitols" (Recommendations 1973).

Hrana Ishrana **1978**, 19(1-2), 57-89 (Croatian version).

Commission on Biochemical Nomenclature: "Tentative rules for carbohydrate nomenclature". *Carb* 26-40.

Chem. Listy **1978**, 72(12), 1257-80 (Czech version).

Commission on Biochemical Nomenclature: "Tentative rules for carbohydrate nomenclature". *Carb* 1-25.

Chem. Listy **1978**, 72(11), 1182-205 (Czech version).

Joint Commission on Biochemical Nomenclature: "Nomenclature of tetrapyrroles" (Recommendations 1978).

Pure Appl. Chem. **1979**, 51(11), 2251-2304.

IUB

Nomenclature Committee of the International Union of Biochemistry: "Nomenclature of iron-sulfur proteins" (Recommendations 1978).

Arch. Biochem. Biophys. **1979**, 195(2), 607-10.

Biochem. J. **1979**, 181(3), 513-16.

Biochim. Biophys. Acta **1979**, 549(2), 101-5.

Eur. J. Biochem. **1979**, 93, 427-30.

Nomenclature Committee of the International Union of Biochemistry: "Enzyme nomenclature".

Academic Press, New York, 1979, 606 pp.

Nomenclature Committee of the International Union of Biochemistry: "Units of enzyme activity" (Recommendations 1978).

Eur. J. Biochem. **1979**, 97(2), 319-20.

OTHER

International Union of Nutritional Sciences, Committee 1/I, Nomenclature: "Generic descriptors and trivial names for vitamins and related compounds" (Recommendations 1976).

Nutr. Abstr. Rev., Ser. A: Human Exptl. **1978**, 48(10), 831-5.

International Union of Pure and Applied Chemistry and International Federation of Clinical Chemistry: "Approved recommendation (1978). Quantities and units in clinical chemistry".

Clin. Chim. Acta **1979**, 96(1-2), 157F-183F.

International Union of Pure and Applied Chemistry and International Federation of Clinical Chemistry: "Provisional recommendation (1978) on quantities and units in clinical chemistry. Optical spectroscopy. Part 1. Theoretical outline and general quantities".

Clin. Chim. Acta **1979**, 95(1), 169F-188F.

International Federation of Clinical Chemistry, Committee on Standards, Expert Panel on Nomenclature and Principles of Quality Control in Clinical Chemistry: "Approved recommendation (1978) on quality control in clinical chemistry. Part 1. General principles and terminology".

Clin. Chim. Acta **1979**, 98(1-2), 129F-143F.

International Federation of Clinical Chemistry Committee on Standards, Expert Panel on Enzymes: "Approved recommendation (1978) on IFCC methods for the measurement of catalytic concentration of enzymes. Part 1. General considerations concerning the determination of the catalytic concentration of an enzyme in the blood serum or plasma of man".

Clin. Chim. Acta **1979**, 98(1-2), 163F-174F.

Noel Lozac'h, Alan L. Goodson, and Warren H. Powell, "Nodal nomenclature-General principles".

Angew. Chem. **1979**, 91(12), 951-64 (German).

Angew. Chem., Int. Ed. Engl. **1979**, 18(12), 887-99.

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