# **Source documents**

The first seven are compilations of IUPAC or IUBMB (International Union of Biochemistry and Molecular Biology) recommendations in book form. Several IUPAC-approved sources then follow. The remainder are articles in *Pure and Applied Chemistry* (PAC) in chronological order

#### 1. B.B. (Blue Book)

IUPAC Nomenclature of Organic Chemistry Sections A, B, C, D, E, F and H.

Pergamon Press, Oxford, 1979.

### 2. B.B.(G) [Blue Book (Guide)]

A Guide to IUPAC Nomenclature of Organic Compounds.

Blackwell Scientific Publications, Oxford, 1993.

### 3. G.B. (Green Book)

IUPAC Quantities, Units and Symbols in Physical Chemistry. Second Edition, Blackwell Scientific Publications, Oxford, 1993.

# 4. O.B. (Orange Book)

IUPAC Compendium of Analytical Nomenclature.

Second Edition, Blackwell Scientific Publications, Oxford, 1987.

### 5. P.B. (Purple Book)

IUPAC Compendium of Macromolecular Nomenclature.

Blackwell Scientific Publications, Oxford, 1991.

# 6. R.B. (Red Book)IUPAC Nomenclature of Inorganic Chemistry.

Third Edition, Blackwell Scientific Publications, Oxford, 1990.

### 7. W.B. (White Book)

IUBMB Biochemical Nomenclature and Related Documents.

Second Edition, Portland Press, London, 1992.

VIM: International Vocabulary of Basic and General Terms in Metrology (VIM), Second Edition, ISO, 1993.

E.R. Cohen and B.N. Taylor, The 1986 Adjustment of the Fundamental Physical Constants, *CODATA Bull.*, 1986, 63, 1

Physical Chemistry Division, unpublished: this denotes a few physicochemical terms not mentioned in the Green Book which were defined specially for this Compendium by the Physical Chemistry Division of IUPAC.

International Organization for Standardization, Geneva.

ISO 31-0:1992, Quantities and Units – Part 0: General Principles, Units and Symbols.

ISO 31-1:1992, Quantities and Units – Part 1: Space and Time.

ISO 31-2:1992, Quantities and Units – Part 2: Periodic and Related Phenomena.

ISO 31-4:1992, Quantities and Units – Part 4: Heat.

ISO 31-5:1992, Quantities and Units – Part 5: Electricity and Magnetism.

ISO 31-10:1992, Quantities and Units – Part 10: Nuclear Reactions and Ionizing Radiations.

#### **PAC** documents

### PAC 1972, 30, 681

Nomenclature of inorganic boron compounds.

#### PAC 1972, 31, 577

Manual of symbols and terminology for physicochemical quantities and units. Appendix II, Part I: definitions, terminology and symbols in colloid and surface chemistry.

# PAC 1974, 31, 499

Manual of symbols and terminology for physicochemical quantities and units. Appendix III: electrochemical nomenclature.

### PAC 1976, 45, 211

Nomenclature and conventions for reporting Mössbauer spectroscopic data.

#### PAC 1976, 45, 221

Nomenclature and spectral presentation in electron spectroscopy resulting from excitation by photons.

### PAC 1976, 46, 71

Manual of symbols and terminology for physicochemical quantities and units. Appendix II, Part II: heterogeneous catalysis.

### PAC 1978, 50, 587

Proposed terminology and symbols for the quantity representing the transfer of solutes from one solute to another.

#### PAC 1978, 50, 1709

Definition and symbolism of molecular force constants.

### PAC 1979, 51, 1195

Separation and preconcentration of trace substances. I-Preconcentration for inorganic trace analysis.

#### PAC 1979, 51, 1213

Terminology and symbols in colloid and surface chemistry. Part 1.13: definitions, terminology and symbols for rheological properties.

# PAC 1979, 51, 2451

Quantities and units in clinical chemistry.

### PAC 1980, 52, 233

Electrode reaction orders, transfer coefficients and rate constants. Amplification of definitions and recommendations for publication of parameters.

### PAC 1980, 52, 2541

Nomenclature, symbols, units and their usage in spectrochemical analysis – IV: X-ray emission spectroscopy.

# PAC 1981, 53, 1805

Assignment and presentation of uncertainties of the numerical results of thermodynamic measurements.

#### PAC 1981, 53, 1827

Nomenclature for transport phenomena in electrolytic systems.

### PAC 1981, 53, 1887

Nomenclature of inorganic chemistry: II.

1- Isotopically modified compounds.

### PAC 1982, 54, 1239

Notation for states and processes, significance of the word standard in chemical thermodynamics, and remarks on commonly tabulated forms of thermodynamic functions.

#### PAC 1982, 54, 1533

Glossary of terms used in nuclear analytical chemistry.

# PAC 1982, 54, 2553

Recommendations on use of the term amplification reactions.

#### PAC 1983, 55, 409

Revision of the extended Hantzsch-Widman system of nomenclature for heteromonocycles.

#### PAC 1983, 55, 553

Recommendations for the usage of selective, selectivity and related terms in analytical chemistry.

#### PAC 1983, 55, 931

Manual of symbols and terminology for physicochemical quantities and units. Appendix II, Part 1.14: light scattering.

### PAC 1983, 55, 1251

Interphases in systems of conducting phases.

# PAC 1983, 55, 2023

Nomenclature, symbols and units recommended for in situ microanalysis.

#### PAC 1984, 56, 232

Nomenclature, symbols, units and their usage in spectrochemical analysis – VI: Molecular luminescence spectroscopy.

### PAC 1984, 56, 567

Physicochemical quantities and units in clinical chemistry with special emphasis on activities and activity coefficients.

### PAC 1984, 56, 769

Treatment of variable valence in organic nomenclature (lambda convention).

#### PAC 1985, 57, 105

Names, symbols, definitions and units of quantities in optical spectroscopy.

### PAC 1985, 57, 531

Definition of pH scales, standard reference values, measurement of pH and related terminology.

#### PAC 1985, 57, 1453

Nomenclature, symbols, units and their usage in spectrochemical analysis – V: radiation sources.

#### PAC 1985, 57, 1491

Recommended terms, symbols, and definitions for electroanalytical chemistry.

### PAC 1985, 57, 1737

Nomenclature for thermal analysis – IV.

### PAC 1986, 58, 437

Interphases in systems of conducting phases.

### PAC 1986, 58, 955

The absolute electrode potential: an explanatory note.

### PAC 1986, 58, 967

Reporting data on adsorption from solution at the solid/solution interface.

#### PAC 1986, 58, 1405

Recommendations for the presentation of thermodynamic and related data in biology.

### PAC 1986, 58, 1737

Quantities and units in clinical chemistry: nebulizer and flame properties in flame emission and adsorption spectrometry.

### PAC 1987, 59, 683

Nomenclature of prenols.

### PAC 1987, 59, 779

Nomenclature of tetrapyrroles.

# PAC 1987, 59, 833

Nomenclature and symbols for folic acid and related compounds.

#### PAC 1988, 60, 1115

Names for hydrogen atoms, ions and groups, and for reactions involving them.

#### PAC 1988, 60, 1389

Nomenclature of glycoproteins, glycopeptides and peptidoglycans.

# PAC 1988, 60, 1395

Nomenclature for cyclic organic compounds with contiguous formal double bonds.

### PAC 1988, 60, 1449

Nomenclature, symbols, units and their usage m spectrochemical analysis - VII: molecular absorption spectroscopy, ultraviolet and visible (UV/VIS).

### PAC 1988, 60, 1461

Nomenclature, symbols, units and their usage m spectrochemical analysis - X: preparation of materials for analytical atomic spectroscopy and other related techniques.

### PAC 1989, 61, 19

Electrochemical corrosion nomenclature.

#### PAC 1989, 61, 23

System for symbolic representation of reaction mechanisms.

### PAC 1989, 6I, 1657

Nomenclature for automated and mechanised analysis.

### PAC 1989, 61, 1783

Nomenclature of steroids.

#### PAC 1989. 61. 2195

Recommendations for EPR/ESR nomenclature and conventions for presenting experimental data in publications.

### PAC 1990, 62, 1193

Nomenclature for sampling in analytical chemistry.

### PAC 1990, 62, 2167

Glossary of atmospheric chemistry terms.

#### PAC 1991, 63, 301

Proposals for the description and measurement of carry-over effects in clinical chemistry.

### PAC 1991, 63, 569

Terminology in semiconductor electrochemistry and photoelectrochemical energy conversion.

### PAC 1991, 63, 735

Nomenclature, symbols, units and their usage in spectrochemical analysis - VIII. Nomenclature system for X-ray spectroscopy.

### PAC 1991, 63, 887

English-derived abbreviations for experimental techniques in surface science and chemical spectroscopy.

### PAC 1991, 63, 895

Nomenclature, symbols, definitions and measurements for electrified interfaces in aqueous dispersions of solids.

### PAC 1991, 63, 1227

Manual on catalyst characterisation.

### PAC 1991, 57, 1307

Nomenclature of derived quantities.

#### PAC 1991, 63, 1541

Recommendations for nomenclature and symbolism for mass spectroscopy (including an appendix of terms used in vacuum technology).

# PAC 1992, 64, 143

Glossary for chemists of terms used in biotechnology.

### PAC 1992, 64, 253

Nomenclature, symbols, units and their usage in spectrochemical analysis - XII. Terms related to electrothermal

atomisation.

PAC 1992, 64, 261

Nomenclature, symbols, units and their usage in spectrochemical analysis - XIII. Terms related to chemical vapour generation.

PAC 1992, 64, 1569

Quantities and units for metabolic processes as a function of time.

PAC 1993, 65, 819

Nomenclature for chromatography.

PAC 1993, 65, 2003

Glossary for chemists of terms used in toxicology.

PAC 1993, 65, 2291

Nomenclature of kinetic methods of analysis.

PAC 1993, 65, 2373

Nomenclature for liquid-liquid distribution (solvent extraction).

PAC 1993, 65, 2397

Special terminology used in supercritical-fluid chromatography and extraction.

PAC 1993, 65, 2405

Nomenclature and terminology for analytical pyrolysis.

PAC 1994, 66, 533

Standard quantities in chemical thermodynamics.

PAC 1994, 66, 577

Definition of terms relating to phase transitions of the solid state.

PAC 1994, 66, 595

Nomenclature for the presentation of results of chemical analysis.

PAC 1994, 66, 891

Quantities and units for electrophoresis in the clinical laboratory.

PAC 1994, 66, 897

Quantities and units for centrifugation in the clinical laboratory.

PAC 1994, 66, 1077

Glossary of terms used in physical organic chemistry.

PAC 1994, 66, 1667

Thin films including layers - terminology in relation to their preparation and characterisation.

#### PAC 1994, 66, 2487

Nomenclature of thermometric and enthalpimetric methods in chemical analysis.

#### PAC 1994, 66, 2493

Classification and definition of analytical methods based on flowing media.

### PAC 1994, 66, 2513

Nomenclature for radioanalytical chemistry.

#### PAC 1994, 66, 2528

Nomenclature of ion-selective electrodes.

### PAC 1994, 66, 2587

Glossary of terms in bioanalytical nomenclature.

### PAC 1995, 67, 473

Recommended terminology for the description of carbon as a solid.

#### PAC 1995, 67, 1307

Glossary of class names of organic compounds and reactive intermediates based on structure.

### PAC 1995, 67, 1563

Properties and units in the clinical laboratory sciences. I. Syntax and semantic rules.

### PAC 1995, 67, 1699

Nomenclature in evaluation of analytical methods including detection and quantification capabilities.

# PAC 1995, 67, 1725

Nomenclature, symbols, units and their usage in spectrochemical analysis - IX. Instrumentation for the spectral dispersion and isolation of optical radiation.

#### PAC 1995, 67, 1745

Nomenclature, symbols, units and their usage in spectrochemical analysis - XI. Detection of radiation.

### PAC 1995, 67, 1913

Nomenclature, symbols, units and their usage in spectrochemical analysis - XV. Laser-based molecular spectroscopy for chemical analysis: laser fundamentals.

### PAC 1996, 68, 149

Glossary of terms used in chemical kinetics, including reaction dynamics.

### PAC 1996, 68, 957

Glossary of terms in quantities and units in clinical chemistry.

### PAC 1996, 68, 2193

Basic terminology of stereochemistry.

### PAC 1996, 68, 2223

Glossary of terms used in photochemistry.

PAC 1996, 68, 2287

Glossary of basic terms in polymer science.