

## **Chemical Nomenclature**

# Chemical Nomenclature

Edited by

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*For my parents*

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# Contents

<b>Preface</b>	<b>xii</b>
<b>1 The need for good nomenclature</b>	<b>1</b>
E. W. GODLY	
References	25
<b>2 From hydrogen to meitnerium: naming the chemical elements</b>	<b>27</b>
P. E. CHILDS	
2.1 Introduction	27
2.2 The search for simplicity: the concept of an element	28
2.3 The naming of the elements before 1789	33
2.4 Lavoisier's contribution	33
2.5 Berzelius and the agreement on symbols	35
2.6 Organizing the elements	37
2.7 Isotopes and radioactivity	39
2.8 Choosing names for new elements	41
2.8.1 Elements named after people	42
2.8.2 Elements named after countries or places	43
2.8.3 Named after a distinctive property	44
2.8.4 Named after a mineral	45
2.8.5 Named after a mythological figure	45
2.9 Some cases of elemental confusion	46
2.9.1 Manganese and magnesium	46
2.9.2 Plumb crazy over lead	48
2.9.3 A Hatchett job on niobium	49
2.10 Hydrogen: a special case	51
2.11 Numbering the columns and groups	51
2.12 Naming groups, columns and rows	52
2.13 Spurious elements	53
2.14 No universal names	54
2.15 Variant English spellings and symbols	54
2.16 IUPAC tries to bring order	55
2.17 Conclusion	56
Appendix 2.A Definitions of 'element' down the ages	57
Appendix 2.B Discovery of the elements	58
Appendix 2.C Chronology of the discovery of the elements	62
References	65

<b>3 Chemical Abstracts Service Chemical Substance Index nomenclature</b>	<b>67</b>
D. W. WEISGERBER	
3.1 Introduction	67
3.2 Mission of CAS	68
3.3 History of CAS	68
3.4 Chemical Substance Indexes	71
3.5 Chemical Substance Index nomenclature	73
3.6 Relationship of CAS nomenclature to national and international authorities	85
3.7 Growth of the chemical literature	88
3.8 CAS registry system	90
3.9 Computer-supported name generation systems	99
3.10 Challenges for the future	101
Bibliography	102
<b>4 IUPAC Nomenclature part 1, organic</b>	<b>103</b>
K. J. THURLOW	
4.1 Introduction	103
4.2 Organic names	105
4.2.1 Where do we begin?	105
4.2.2 How do we decide on a name?	106
4.2.3 Unsaturated compounds	115
4.2.4 Unsaturated cyclic compounds	116
4.2.5 Multivalent radicals from unsaturated cyclic compounds	117
4.2.6 Fusion	117
4.2.7 Bridges	119
4.2.8 Spiro compounds	120
4.2.9 Hydrocarbon ring assemblies	121
4.2.10 Heterocyclic systems	122
4.2.11 Replacement nomenclature	124
4.2.12 Seniority of chains	124
4.2.13 Seniority of rings	125
4.2.14 Indicated hydrogen	125
4.2.15 Other suffixes	126
4.2.16 Summary	126
References	126
<b>5 IUPAC nomenclature part 2, organic, inorganic and others</b>	<b>127</b>
K. J. THURLOW	
5.1 Specific examples	127

5.1.1	Assembly names	128
5.1.2	Special systems	131
5.1.3	Phane nomenclature	131
5.1.4	Fullerenes	131
5.1.5	Ions	132
5.2	Stereochemistry	132
5.2.1	Chirality	133
5.3	Deducing the structure from the name	136
5.4	Inorganic names	136
5.4.1	Simple inorganic names	137
5.4.2	Alphabetical order	137
5.4.3	Oxidation and charge numbers	137
5.4.4	Hydrides	138
5.4.5	Coordination compounds	138
5.4.6	Porphyrins, etc.	142
5.4.7	General problems	143
5.4.8	Summary	143
	References	145
<b>6</b>	<b>Nomenclature for polymer chemistry</b>	<b>146</b>
	A. D. JENKINS	
6.1	Introduction	146
6.2	The stipulation	147
6.3	Polymers and polymer molecules: basic definitions of terms	148
6.4	Regular single-strand, quasi-single-strand and double-strand polymers	150
6.5	Polymer formulae	152
6.6	Copolymers	152
6.7	Irregular single-strand organic polymers	154
6.8	Double-strand organic polymers	155
6.9	Non-linear polymers	155
6.10	Stereochemistry	156
6.11	Individual macromolecules, their assemblies and dilute polymer solutions	156
6.12	Crystalline polymers and liquid-crystal polymers	157
6.13	Polymerization reactions	157
6.14	Degradation and ageing	158
6.15	Multi-phase polymer systems	158
6.16	Mechanical properties	158
6.17	Current and future projects	159
6.18	Conclusion	159
	Acknowledgements	160
	References	160



<b>7 Natural Products</b>	<b>162</b>
J. BUCKINGHAM	
7.1 Introduction	162
7.2 Trivial names	164
7.2.1 Good practice in the assignment of trivial names	167
7.3 'Semi-trivial' names; a class that should be discouraged	169
7.4 Biogenetic numbering and the natural product specialists' semi-systematic schemes	172
7.5 Systematic nomenclature	175
7.6 IUPAC semi-systematic names	175
7.6.1 Modification of fundamental parent structures	176
7.7 Stereochemical considerations	179
7.7.1 The <i>ent</i> -convention	181
7.8 Review of natural product classes	183
7.8.1 Aliphatic compounds; lipids	183
7.8.2 Aromatic, heteroaromatic and reduced aromatic systems	183
7.8.3 Carbohydrates; glycosides	186
7.8.4 Tannins	188
7.8.5 Terpenoids	188
7.8.6 Steroids	195
7.8.7 Flavonoids	196
7.8.8 Lignans	198
7.8.9 Amino acids and peptides	199
7.8.10 Alkaloids	200
7.8.11 Polypyrroles	204
7.9 Conclusion	205
References	206
<b>8 Trivial nomenclature: the INN and ISO systems</b>	<b>208</b>
R. B. TRIGG	
8.1 Introduction	208
8.2 The INN System	208
8.2.1 Background	208
8.2.2 Secretariat mechanism	209
8.2.3 Guiding principles	213
8.2.4 The 'prefix-stem' approach	214
8.2.5 Stereochemistry	217
8.2.6 Modified INN	219
8.2.7 Radicals and groups	219
8.2.8 Recombinant biological substances	221
8.2.9 Mixtures	223
8.2.10 The trade mark interface and the protection of INN	225

## CONTENTS

xi

8.2.11	Computer support	227
8.2.12	Summary	228
8.3	The ISO system	228
8.3.1	Constitution	229
	References	234
<b>9</b>	<b>Computer-generated chemical nomenclature</b>	<b>235</b>
	S. B. WALKER	
	<b>Index</b>	<b>243</b>

## Preface

My interest in nomenclature started when I was child. I was listening to a recording of Tom Lehrer performing *The Elements*. The original was almost worn out as I tried to write down the words and make sense of them. Praseodymium, proactinium, dysprosium . . . What could they mean? The more I learned, the more fascinating it became. A twin interest in chemistry and words fuelled the desire for more knowledge. I joined the Laboratory of the Government Chemist (LGC) and worked in a variety of areas. When a member of the Chemical Nomenclature Advisory Service (CNAS) was approaching retirement, I was asked to replace him. Part of the duties included writing articles on nomenclature for the *VAM Bulletin*, a publication supporting the Department of Trade and Industry's Initiative on 'Valid Analytical Measurement' Nomenclature underpins all analysis, because if you do not know what you are analysing, you will not get very far. These articles were written for non-specialists and proved to be the genesis for this book.

The idea was to produce a book which would give a general introduction to forms of nomenclature, without reading too much like a text book. Nomenclature can be interesting, not just a 'necessary evil'. Some people even think it is an 'unnecessary evil'! Chemical names do not have to be deadly serious. There have been many books on specific aspects of nomenclature, but this volume deals with both 'systematic' and 'trivial' names. Apart from a general discussion on why you need nomenclature, readers can compare CAS and IUPAC styles, which have many similarities, but important differences. Specialised naming systems are needed for polymers and natural products, and of course no such work would be complete without a chapter on the elements. Computers are playing an increasing role in nomenclature, and work continues in the quest to find a program which will name a given structure correctly and quickly.

It is impossible to deal with these subjects without some complicated material, indeed it is necessary to demonstrate how difficult some problems are. However, I hope the non-specialist will appreciate the material herein, and that the specialist will appreciate information on unfamiliar areas. Rivalry between nomenclators is frequently intense, but we all have the same aim, and perhaps this book will engender better understanding and cooperation.

I would like to thank everyone involved in this book. The authors and publishers have put a great deal of effort into its production.

Dr Richard Worswick, Chief Executive of LGC, has kindly given permission for CNAS material to be used in the preparation of this book. I must also thank my CNAS colleagues, without whose assistance I would not have been in a position to participate in this project. Norman Soutar (my first trainer), Gary Sayers, Ivor Cohen and Ted Godly have all offered helpful advice over the last few years, and pointed out errors! Thanks also to IUPAC.

I hope this book helps explain why nomenclature is necessary and how it works.

Kevin Thurlow  
February 1998