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Cumulative Author and Subject Indices

to proceedings of the

Nova Scotian Institute of Science

Volumes 1-39 (1863 to 1992) Inclusive

The Nova Scotian Institute of Science has published facts about the natural history of the Province (and also of much of Canada) in its Proceedings since 1863. The Proceedings are therefore important, not only to students of the history of science, but to all those scientists, now and in the future, whose interests require a knowledge of their predecessors work. The Proceedings are difficult to access, because volumes 1-8 are hard to find and in addition no index has been published since volume 26. A cumulative index to volumes 1-7 was published (Proc. N.S. Inst. Sci. 7: 495-523) in 1890 and a further cumulative index to volumes 1-25 in 1953. Neither of these segregated a list of authors from a subject index and the latter covered information found only in the titles of papers and abstracts.

Bibliographic and editorial work for the Institute has become increasingly difficult in recent years because of the problem of finding information published in the Proceedings. The Council of the Institute therefore authorized a thorough cumulative index of Volumes 1-39 inclusive and this is now published as separate author and subject indices. Certain conventions have been adopted in the assembly of these indices and these are described in the next two sections of this introduction.

Author index

All authors (825) of papers and abstracts are included in this index and are given in strict alphabetical order (e.g. MacA... appears before McA...). The titles of some papers are slightly expanded to give a better indication of their content. In such cases additional material is enclosed in parentheses, care must therefore be taken to distinguish editorial additions from e.g., parenthetic binominal addenda. In other cases, titles have been abbreviated slightly to standardize the format of the index. Throughout, where authors have used terms that have been superseded by internationally agreed nomenclature, the terms have been replaced. As far as possible units have been converted into the centimetre-second-gram system. Prefixes used are translated in the table of abbreviations found at the end of the subject index. Abstracts are distinguished from full papers by an asterisk. The titles of all abstracts are given, even those that contain minimal information. A full list of references is given for each author, but the titles of papers and abstracts having more than one author are only given for the author first named.

Subject Index

About 80% of the papers published in the Proceedings could be classified as biology. The subject index has therefore been built by assembling a list of the binominal names of plants and animals that form the subject of original botanical and zoological studies. A consistent use of authorities has not been achieved for many reasons and this is an area that might well be improved in future editions of this index. Species that are

merely mentioned in catalogues (e.g. floras) are not included, and species reported in reviews are only included if they are judged to illustrate, or alert the reader to the subject matter. Obviously this judgement is biased, but can be corrected in future editions. The index incorporates a glossary of common English names of species and their corresponding scientific nomenclature. This has been done to enable the use of binominal names throughout the index because the Proceedings are exchanged with many scientific societies whose members might be unfamiliar with these common names. There are, of course many instances where the taxonomy of species has been changed and an attempt has been made to give cross references in these cases.

There are, however, many papers that describe work of general biological interest particularly in the fields of physiology and biochemistry. Thus in addition to the list of organisms there is a section of the index devoted to biology that is subdivided into the various sub-disciplines, with the exceptions of agriculture, horticulture, phenology and paleontology. The first two of these subjects are combined in a separate section and the latter finds its traditional place as a subdiscipline of geology. In cross referencing the main subject heading e.g. "biology" is given first followed by the subdiscipline or subject e.g. "ecology". The phenological data, collected over 31 years by Dr. A.H. MacKay, are a major contribution to Canadian science and are given in a separate section.

An attempt has been made to provide a geographical index to allow those who for example, are interested in the ecology of an area to be easily able to find all references to that location. In Nova Scotia it has been somewhat inconsistently divided into papers dealing generally with the Province, and papers classified on a county basis with one exception. This deals with Cape Breton. Elsewhere, subdivision is made only to provincial or state level.

Most papers on other scientific disciplines can be found under the appropriate heading, except for geology and physics which are divided into the usual sub-disciplines. There are very few papers dealing with purely chemical investigations. Thus chemical aspects of papers are classified under three headings: analytical methods and techniques, minerals, and chemical substances. Papers on physical chemical topics, especially thermodynamics, are given under the appropriate sub-heading in physics.

The chemical substances section is arranged, more or less, in accord with Chemical Abstracts conventions. All substances are given in alphabetical order. Carbon compounds are given (where possible) in order of increasing numbers of carbon atoms in the molecule and within each set of compounds having the same numbers of carbon atoms, in increasing numbers of *hydrogen* atoms i.e. not in alphabetical order. Within each group of carbon and hydrogen atoms the remaining elements in the molecules are given in alphabetical order. As in Chemical Abstracts usage the technique of roots is occasionally used. Thus derivatives of 2-amino-3-phenylpropan-1-ol are given under this heading in order of increasing molecular weight. Here and throughout the subject index a dash "-" is used to indicate repetition of words on the previous line. Selection rules for chemicals to appear in this subsection of the index were similar to the selection of species (see above), particularly in the case of review papers. Throughout the indices, symbols for chemical elements are used that are recommended by the International Union of Pure and Applied Chemistry. In formulae numerical subscripts indicate multiple atomic species in the molecule, numerical superscripts preceding the symbol indicate abnormal isotopic species, and those following the symbol(s) ionic charge.

Many subjects reported in abstracts give little or no factual data; these are not incorporated into the subject index unless a reference is given in the abstract to full publication of the experimental data in another journal. Where space is available this journal name is indicated in the index. Several instruments and other measuring equipment are mentioned in abstracts and papers but are not included in the subject index unless sufficient details e.g. drawings, are given to allow them to be constructed or bought.

The assembly of these indices has been facilitated by the use of a computer and as a result the texts are available in Macintosh or IBM format on 800 Kbyte or 1.44 Mbyte 3.5" discs or on 5.25" floppy discs. Copies of these discs can be purchased from the Institute for $25.00. When ordering the disc please state the format and type of disc required. The information on the discs is in text format and can be read in any of the usual word-processing utilities. Alternatively the discs can be supplied in one (e.g. Wordperfect) of these formats.

Many scientists will find these discs more useful than the printed form because they can be expanded by their owners to incorporate data published in future and/or additional data on topics that are of particular interest to them. The Editors hope that users of the index will report the errors and omissions that they find, so that the electronic version of the index, at least, can be continually improved.

AUTHOR INDEX

SUBJECT INDEX

Chemical substances

Economics and Sociology

Engineering

Instrumentation

ABBREVIATIONS USED IN THE INDICES

An attempt has been made to avoid abbreviations (including their use by authors) but inevitably some have been used to maintain a consistant format. The following is an incomplete list whose omissions are largely confined to authorities for binominal names.

Arg	arginine; 2-amino-5-guanidinovaleric acid
Assoc.	association
B.C.	British Columbia
Btu	Brtish thermal unit (1 Btu = 1,054.8 joules)
Can.	Canada
cm	centimetre (metre x 10^{-2})
Co.	county
E	east
Et	ethyl
etc.	including other inferred or related matters
fam.	family (in a taxonomic sense)
fg	femtogram (gram x 10^{-15})
Fig.	figure (illustration)
Fr.	Fries
ft.	foot (1 foot = 0.3048 metres)
g	gram
Geol.	geology
Glu	glucose
h	hour
Herb	herbarium (usually including accession number)
His	histidine; 2-amino-3-(imidazolyl-5')propionic acid
Hoffm.	Hoffmann

Hz	hertz (cycles per second)
incl.	including
J.	journal
k	kilo (x 10^3)
L.	Linneas
Lamb.	Lambert
Leu	leucine; 2-amino-4-methylvaleric acid
Lib.	Libert
M	mega (x 10^6)
m	metre
M.Sc.	Master of Science degree
Man.	Manitoba
max.	maximum
Me	methyl
mg	milligram (10^{-3} gram)
MHz	megahertz (hertz x 10^6)
mL	millilitre (Litre x 10^{-3})
Mm	megametres (metre x 10^6)
N	north
N.B.	New Brunswick
N.S.	Nova Scotia
nov. sp. (n. sp.)	plant or animal described for the first time
°C	degrees Celsius
Ont.	Ontario
P.E.I.	Prince Edward Island
pg	picogram (gram x 10^{-12})
Phe	phenylalanine; 2-amino-3-phenylpropionic acid
Proc.	proceedings
Pt.	point (usually geographical)
Pub.	public
Qué	Québec
R.	river
Raf	raffinose
S	south
s	second
Sask.	Saskatchewan
sp.	species
spp.	species (plural)
ssp.	sub-species
St.	Saint (usually in geographical name)
Stack.	Stackhouse
Suc	sucrose
U	university
U.K.	United Kingdom of Great Britain & Northern Ireland
U.S.A.	United States of America
vit.	vitamin
W	west
Xyl	xylose
y	year