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List D Chemical methods and data terms

General notes

These thesaurus lists, lists A-R, are used by GeoRef indexers for selecting index terms and by searchers for additional information not necessarily found in individual term records in the body of the Thesaurus. In most cases, an hierarchical list is given. In some cases, an alphabetical or other list is provided.

The notes under **Searching** attempt to guide the searcher in the use of the list. Searchers might also read the notes on **Indexing** for further clues but should be aware that these notes reflect current practice which in some cases differs from past practice. Further notes on specific terms are in the body of the Thesaurus and additional notes on searching are in the GeoRef Thesaurus, 11th edition Introduction section on searching beginning on page x. Information specific to searching and the individual list topics is included, e.g., a section on age-dating methods begins on page xi.

Under **Indexing** the current indexing practice is given. These notes should be read along with the instructions under the individual terms in the body of the Thesaurus.

Chemical hierarchies

The term <u>chemical elements</u> is used in a very general sense and is not autoposted to the individual elements. Under this heading, the user can look at the See Also term relationships to groups of elements and some individual elements which are not grouped in the Thesaurus, e.g. <u>carbon</u> or <u>silicon</u>. All elements in the periodic table may be used as index terms. Prior to 1981, element terms were used for both economic and geochemical papers. Starting in 1981, other terms have been added for economic papers, e.g. beryllium ores, see List C-1, and the element terms have been restricted to geochemical papers.

Examples of groups include relationships which are explicit in the periodic table such as <u>alkaline earth metals</u> as well as other groups based on various properties such as <u>siderophile elements</u>.

Some useful terms are deuterium and tritium. Some useful groups are:

isotopes

metals

noble gases (used for rare gases and inert gases)

<u>rare earths</u> (used for lanthanide series, inner transition elements, and lanthanoans. Rare earths autoposts to its narrower terms) Three terms related to chemical elements which are used extensively are <u>major elements</u>, <u>minor elements</u>, and <u>trace elements</u>. They do not autopost to their narrower terms.

The term <u>isotopes</u> is autoposted to its narrower terms. Isotopes are generally used with their number, e.g. <u>C-14</u>, and the ratios are used in an expanded form, e.g. <u>O-18/O-16</u>. For isotopes used in absolute age dating, see the format reflected in List B.

Chemical methods and data terms

Major terms used in geochemistry include:

geochemistry isotopes chemical analysis electron microscopy spectroscopy thermal analysis

X-ray analysis

The term <u>chemical analysis</u> is used with methods terms or data terms when some aspect of <u>chemical analysis</u>, usually <u>sample</u> preparation techniques, methods, or instruments is discussed.

The chemical methods and data terms which are included in the body of this Thesaurus are found in List D. In most cases, geochemical methods and data terms differ. Methods-type terms are used for studies emphasizing methods, techniques, and instruments. Data-type terms are used only for reports of actual analysis.

Searching

For geochemical references entered through 1980, search the element AND (geochemistry OR the appropriate category), see Subjects Covered, List A. From 1981 on, search the elements.

For economic references, see List C.

Indexing

Index all elements up to 10 as appropriate. Back to top