



Chemical Abstracts

Chemical Abstracts is the most comprehensive scientific abstracting service in English. It provides a complete bibliographic reference to the original publication and a non-critical summary of its content. Over 15,000 scientific and engineering journals, patents from 26 countries, conference proceedings, reports, and monographs are monitored. Over 55% of this material is in English, with the remainder in any of 66 other languages.

The abstracts are arranged in 80 sections grouped under five broad headings and are published weekly. Through volume 125 (1996), biochemistry and organic chemistry are covered in one week, and macromolecular chemistry, applied chemistry and chemical engineering, and physical and analytical chemistry in the alternate week. **From 1997 forward all fields are covered in each issue.**

Some familiarity with chemistry and its terminology is necessary for the efficient use of this tool. Once the construction of the indexes is understood, there should be little difficulty in the use of CA. However, hands-on experience is the only way a full understanding can be achieved. CA from 1967 to the present can also be searched online in the library with the use of SciFinder Scholar, a user-friendly search system which utilizes a graphical interface. Inquire at the reference desk.

CA in print form is located at the south end of level 5 of Thomas Jefferson Library.
This library owns the complete set from 1907 to the present.

GENERAL INSTRUCTIONS

All indexes (except Index of Ring Systems) refer to abstract numbers, and abstracts are numbered consecutively within each volume or half-year period. The collective indexes refer both to volume and abstract number. Each abstract contains bibliographic information as well as a short summary of the document. The full title of a journal can be determined from the abbreviated form which appears in the reference by using **Chemical Abstracts Service Source Index (CASSI) (REF DESK QD 1 .A514)**.

INDEX GUIDE

The Index Guide should be consulted before beginning a new search in CA. It provides cross-references from chemical substance names and general subject terms used in the literature to the terminology employed by the Chemical Abstracts Service. It is reissued every couple of years in its entirety.

INDEXES RELATED TO TIME PERIOD COVERED

Indexes to CA are to be found in each weekly issue. However, more efficient access can be obtained through use of the volume indexes (each volume comprising a half-year period), or the collective indexes (comprising a 10- or 5-year period). All indexes are described on page 2.



WEEKLY ISSUE INDEXES

Each weekly issue of CA contains several indexes. These include only the author index, patent index, and a keyword-subject index. The subject index is free-term (terminology employed is not standardized but drawn from titles and abstracts) and provides the only subject or chemical substance access until the volume indexes appear.

VOLUME AND COLLECTIVE INDEXES AS CURRENTLY PUBLISHED

***AUTHOR INDEX:**

Lists personal and corporate authors, patentees, and assignees in alphabetical order with titles of articles of patent specifications and CA abstract numbers.

***PATENT INDEX:**

Relates new patent numbers, grouped by country in ascending numerical order, with their corresponding CA abstract numbers. If the same patent has been taken in more than one country, a cross-reference is provided.

***FORMULA INDEX:**

Relates the molecular formulas for chemical substances with the CA chemical substance index names, CAS registry numbers, and corresponding CA abstract numbers. Formulas are arranged according to the Hill system: first C's, then H's, followed by other elements in alphabetical order. References to abstracts do not include descriptions of the documents' content. However, this index is most useful in identifying the CA chemical substance name, which should then be used to access the Chemical Substance Index.

***GENERAL SUBJECT INDEX:**

Relates index entries which do not refer to specific chemical substances to the corresponding CA abstracts. These entries include concepts, general classes of chemical substances, applications, uses, properties, reactions, and processes. Guidance to vocabulary and usage is provided by the Index Guide. Prior to 1971 this index included chemical substance names as well.

***CHEMICAL SUBSTANCE INDEX:**

Relates the CA index name of chemical substances (and their CAS registry numbers) to CA abstract numbers for documents in which the substances are mentioned. For each reference a brief description of the document's content is included. Proper CA names and an explanation of the nomenclature system can be found in the Index Guide. Prior to 1971 chemical substance names are found in the General Subject Index.

***INDEX OF RING SYSTEMS:**

Ring composition, ring size, and number of rings are listed, allowing one to determine the systematic CA name.