

CA SECTION TITLE (/SH) and CA SECTION CODE (SC=) Fields in CA SEARCH

The title of the section in which the abstract appears in *Chemical Abstracts* is listed in the CA Section Title field and the code equivalent of the title is listed in the CA Section Code field. In addition, documents indexed since the beginning of CA Volume 86 (1977) may also be cross-referenced to one or more additional sections, the titles and codes of which are also in these fields.

A listing of current Section Codes and titles is included at the end of this document. Definitions of the sections are available from Chemical Abstracts Service (CAS).

CAS has made changes in Section Titles and numbering over the time span of the database. Most of these changes have been made at the beginning of a new Collective Index Period. These changes should be taken into consideration when Section Titles or codes are used in a search strategy, as discussed below.

Searching Section Titles. Section Titles of the original, as well as the cross-reference sections, are searchable as the complete title or by each individual, meaningful word in the Section Title, e.g.,

```
? S MICROBIAL BIOCHEMISTRY/SH

      S1 310553 MICROBIAL BIOCHEMISTRY/SH
?S MICROBIAL(W)BIOCHEMISTRY/SH

      451507 MICROBIAL/SH
      2520587 BIOCHEMISTRY/SH (SEE ?BROAD)
      S2 310553 MICROBIAL(W)BIOCHEMISTRY/SH
?T 2/SC/1,310553

2/SC/1
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SECTION:
CA231003 Alkaloids
CA210XXX Microbial Biochemistry

2/SC/310553
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SECTION:
CA808000 Microbial Biochemistry
```

In general, the search by complete phrase processes more quickly than the search by individual words with the /SH suffix. Note that the Section Code for the section on Microbial Biochemistry has changed over time.

CAS generally does not use words or phrases from a Section Title as descriptors or identifiers for abstracts assigned to the section. Therefore Section Title terms can be used to define broad subject areas or restrict other very broad search terms to a specific context defined by a Section Title.

Over the time span of the database, CAS has made changes in Section Titles and Section Codes. Thus searching by Section Titles, rather than Section Codes, insures correct retrieval without the need to relate Section Codes to particular volume ranges. For example, the Toxicology section is Section 4 in the 9th through the 14th Collective Index Periods, but it was Section 14 in the 8th Collective Index Period. The search statement SELECT TOXICOLOGY/SH retrieves all items assigned to the section in all of the Collective Index Periods, i.e.,

```
?S TOXICOLOGY/SH
```

```
      S3 421240 TOXICOLOGY/SH (SEE ?BROAD)
?T3/AZ,SH/1,421240
```

```
3/AZ,SH/1
```

```
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```

```
133358551 CA: 133(25)358551s
```

```
SECTION:
```

```
CA279000 Inorganic Analytical Chemistry
```

```
CA204XXX Toxicology
```

```
CA250XXX Propellants and Explosives
```

```
CA259XXX Air Pollution and Industrial Hygiene
```

```
CA261XXX Water
```

```
3/AZ,SH/421240
```

```
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```

```
66001224 CA: 66(1)1224a
```

```
SECTION:
```

```
CA814000 Toxicology
```

Searching Section Codes. The SC= field lists the code that identifies the section and subsection location of the citation within an issue of *Chemical Abstracts*.

Section Titles correspond to the basic five-character Section Code, e.g., Extractive Metallurgy is the title of section 54 (SC=CAn54, where n is a digit signifying the Collective Index Period). For primary placement of the abstract in *Chemical Abstracts*, each section is further subdivided into subsections represented by three digits attached to the basic Section Code, e.g., Section Codes ending in three zeros (000) indicate the review subsection. (Note that prior to CA Volume 77 in 1972, all Section Codes end in three zeros. In File 308, it is better to use the term REVIEW to find review articles). There are no title equivalents to the subsections. Cross-reference assignments are made only at the section level. All cross-reference Section Codes use XXX as the subsection portion of the code.

Because most of the changes in Section Titles or numbering have been made at the beginning of a new Collective Index Period, the Dialog system inserts a digit into the third position of the Section Code to indicate the Collective Index Period. For example, SELECT SC=CA820 retrieves the records assigned to the Fertilizers, Soils, and Plant Nutrition section (20) in the 8th Collective Index Period, but SELECT SC=CA920 retrieves the records assigned to the History, Education, and Documentation Section (20) in the 9th Collective Index Period. The Collective Index Periods and the digits used to represent them are summarized below:

Collective Index Period	Digit used in third position of Section Code
8 th	8
9 th	9
10 th	0
11 th	1
12 th	2
13 th	2
14 th	2

Section Codes that have remained unchanged for the entire time span of the database can be easily searched using the internal truncation character in the third position of the code. For example, SELECT SC=CA?48 retrieves all records assigned or cross-referenced to the Unit Operations and Processes section, e.g.,

```
?S SC=CA?48
```

```
      S4 276098 SC=CA?48
?T4/sc
```

```
4/SC/1
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```

```
SECTION:
CA279002 Inorganic Analytical Chemistry
CA248XXX Unit Operations and Processes
CA259XXX Air Pollution and Industrial Hygiene
```

To exclude the cross-referenced records, use the following search statement:

```
?S SC=CA?48 NOT SC=CA?48XXX
```

```
      276098 SC=CA?48
      53290 SC=CA?48XXX
      S5 222808 SC=CA?48 NOT SC=CA?48XXX
?T5/sc
```

```
5/SC/1
DIALOG(R)File 399:(c) 2000 American Chemical Society. All rts. reserv.
```

SECTION:

CA248011 Unit Operations and Processes
CA263XXX Pharmaceuticals

The following significant changes in section numbering and definitions were made during the 9th Collective Index Period:

- Beginning with Volume 81, Sections 51 and 52 were redefined. Section 51 (Petroleum, Petroleum Derivatives, and Related Products) became "Fossil Fuels, Derivatives, and Related Products," which incorporates all of old Sections 51 and 52, and part of old Section 53. Section 52 (Coal and Coal Derivatives) became "Electrochemical, Radiational, and Geothermal Energy Technology" and incorporates parts of old Sections 16, 48, 71, 73, 75, and 77. As this was a running change, there is no specific distinction in the online Section Code index between the old and new definitions.
- Beginning with Volume 82, Sections 70, 71, and 72 became Sections 75, 76, and 77, and vice versa. This was a numbering change only. In order to differentiate between old and new sections, the phrase (PRE 1975) has been added to the online index for all six old sections and their subsections.

To search on the sections affected by these changes, it is easier and more comprehensive to search by Section Titles rather than Section Codes, as discussed above.

**Chemical Abstracts Section Numbers and Titles
(as of December 2000, CA Volume 133)**

CA Section	Section Title (/SH)	Section Code (SC=) (Collective Index Period)				
		12 th - 14 th	11 th	10 th	9 th	8 th
BIOCHEMISTRY SECTIONS						
1	Pharmacology Pharmacodynamics History, Education, and Documentation	CA201 - -	CA101 - -	- CA001 -	CA901	- - CA801
2	Mammalian Hormones Hormone Pharmacology General Biochemistry	CA202 - -	CA102 - -	- CA002 -	- CA902 -	- - CA802
3	Biochemical Genetics Biochemical Interactions Enzymes	CA203 - -	CA103 - -	- CA003 -	- CA903	- - CA803
4	Toxicology Hormones	CA204 -	CA104 -	CA004 -	CA904 -	- CA804
5	Agrochemical Bioregulators Agrochemicals Radiation Biochemistry	CA205 - -	CA105 - -	- CA005 -	- CA905 -	- - CA805
6	General Biochemistry Biochemical Methods	CA206 -	CA106 -	CA006 -	CA906 -	- CA806
7	Enzymes Plant Biochemistry	CA207 -	CA107 -	CA007 -	CA907 -	- CA807
8	Radiation Biochemistry Microbial Biochemistry	CA208 -	CA108 -	CA008 -	CA908 -	- CA808
9	Biochemical Methods Nonmammalian Biochemistry	CA209 -	CA109 -	CA009 -	CA909 -	- CA809
10	Microbial Algal, and Fungal Biochemistry (13th cip) Microbial Biochemistry Animal Nutrition	CA210 CA210 -	- CA110 -	- CA010 -	- CA910 -	- - CA810
11	Plant Biochemistry Mammalian Biochemistry	CA211 -	CA111 -	CA011 -	CA911 -	- CA811
12	Nonmammalian Biochemistry Mammalian Pathological Biochemistry	CA212 -	CA112 -	CA012 -	CA912 -	- CA812
13	Mammalian Biochemistry Immunochemistry	CA213 -	CA113 -	CA013 -	CA913 -	- CA813
14	Mammalian Pathological Biochemistry Toxicology	CA214 -	CA114 -	CA014 -	CA914 -	- CA814
15	Immunochemistry Pharmacodynamics	CA215 -	CA115 -	CA015 -	CA915 -	- CA815
16	Fermentation and Bioindustrial Chemistry Fermentations	CA216 -	CA116 -	CA016 -	CA916 -	- CA816
17	Food and Feed Chemistry Foods	CA217 -	CA117 -	- CA017	- CA917	- CA817
18	Animal Nutrition Plant-Growth Regulators	CA218 -	CA118 -	CA018 -	CA918 -	- CA818

19	Fertilizers, Soils, and Plant Nutrition Pesticides	CA219 -	CA119 -	CA019 -	CA919 -	- CA819
20	History, Education, and Documentation Fertilizers, Soils, and Plant Nutrition	CA220 -	CA120 -	CA020 -	CA920 -	- CA820
ORGANIC CHEMISTRY SECTIONS						
21	General Organic Chemistry	CA221	CA121	CA021	CA921	CA821
22	Physical Organic Chemistry	CA222	CA122	CA022	CA922	CA822
23	Aliphatic Compounds	CA223	CA123	CA023	CA923	CA823
24	Alicyclic Compounds	CA224	CA124	CA024	CA924	CA824
25	Benzene, Its Derivatives, and Condensed Benzenoid Compounds Noncondensed Aromatic Compounds	CA225 -	CA125 -	- CA025	- CA925	- CA825
26	Biomolecules and Their Synthetic Analogs Condensed Aromatic Compounds	CA226 -	CA126 -	- CA026	- CA926	- CA826
27	Heterocyclic Compounds (One Hetero Atom)	CA217	CA127	CA027	CA927	CA827
28	Heterocyclic Compounds (More Than One Hetero Atom)	CA228	CA128	CA028	CA928	CA828
29	Organometallic and Organo-metalloidal Compounds	CA229	CA129	CA029	CA929	CA829
30	Terpenes and Terpenoids Terpenoids	CA230 -	CA130 -	- CA030	- CA930	- CA830
31	Alkaloids	CA231	CA131	CA031	CA931	CA831
32	Steroids	CA232	CA132	CA032	CA932	CA832
33	Carbohydrates	CA233	CA133	CA033	CA933	CA833
34	Amino Acids, Peptides, and Proteins Synthesis of Amino Acids, Peptides, and Proteins	CA234 -	CA134 -	- CA034	- CA934	- CA834
MACROMOLECULAR CHEMISTRY SECTIONS						
35	Chemistry of Synthetic High Polymers Synthetic High Polymers	CA235 -	CA135 -	- CA035	- CA935	- CA835
36	Physical Properties of Synthetic High Polymers Plastics Manufacture and Processing	CA236 -	CA136 -	- CA036	- CA936	- CA836
37	Plastics Manufacture and Processing Plastics Fabrication and Uses	CA237 -	CA137 -	- CA037	- CA937	- CA837
38	Plastics Fabrication and Uses Elastomers, Including Natural Rubber	CA238 -	CA138 -	- CA038	- CA938	- CA838

39	Synthetic Elastomers and Natural Rubber Textiles	CA239 -	CA139 -	- CA039	- CA939	- CA839
40	Textiles Dyes, Fluorescent Whitening Agents, and Photosensitizers	CA240 -	CA140 -	- CA040	- CA940	- CA840
41	Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers Leather and Related Materials	CA241 -	CA141 -	- CA041	- CA941	- CA841
42	Coatings, Inks, and Related Products	CA242	CA142	CA042	CA942	CA842
43	Cellulose, Lignin, Paper, and Other Wood Products	CA243	CA143	CA043	CA943	CA843
44	Industrial Carbohydrates	CA244	CA144	CA044	CA944	CA844
45	Industrial Organic Chemicals, Leather, Fats, and Waxes Fats and Waxes	CA245 -	CA145 -	- CA045	- CA945	- CA845
46	Surface-Active Agents and Detergents	CA246	CA146	CA046	CA946	CA846
APPLIED CHEMISTRY AND CHEMICAL ENGINEERING SECTIONS						
47	Apparatus and Plant Equipment	CA247	CA147	CA047	CA947	CA847
48	Unit Operations and Processes	CA248	CA148	CA048	CA948	CA848
49	Industrial Inorganic Chemicals	CA249	CA149	CA049	CA949	CA849
50	Propellants and Explosives	CA250	CA150	CA050	CA950	CA850
51	Fossil Fuels, Derivatives, and Related Products Petroleum, Petroleum Derivatives, and Related Products	CA251 -	CA151 -	CA051 -	CA951 -	- CA851
52	Electrochemical, Radiational, and Thermal Energy Technology Coal and Coal Derivatives	CA252 -	CA152 -	CA052 -	CA952 -	- CA852
53	Mineralogical and Geological Chemistry	CA253	CA153	CA053	CA953	CA853
54	Extractive Metallurgy	CA254	CA154	CA054	CA954	CA854
55	Ferrous Metals and Alloys	CA255	CA155	CA055	CA955	CA855
56	Nonferrous Metals and Alloys	CA256	CA156	CA056	CA956	CA856
57	Ceramics	CA257	CA157	CA057	CA957	CA857
58	Cement, Concrete, and Related Building Materials Cement and Concrete Products	CA258 -	CA158 -	- CA058	- CA958	- CA858
59	Air Pollution and Industrial Hygiene	CA259	CA159	CA059	CA959	CA859

60	Waste Treatment and Disposal Sewage and Wastes	CA260 -	CA160 -	- CA060	- CA960	- CA860
61	Water	CA261	CA161	CA061	CA961	CA861
62	Essential Oils and Cosmetics	CA262	CA162	CA062	CA962	CA862
63	Pharmaceuticals	CA263	CA163	CA063	CA963	CA863
64	Pharmaceutical Analysis	CA264	CA164	CA064	CA964	CA864
PHYSICAL AND ANALYTICAL CHEMISTRY SECTIONS						
65	General Physical Chemistry	CA265	CA165	CA065	CA965	CA865
66	Surface Chemistry and Colloids	CA266	CA166	CA066	CA966	CA866
67	Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms Catalysis and Reaction Kinetics	CA267 -	CA167 -	- CA067	- CA967	- CA867
68	Phase Equilibria, Chemical Equilibria, and Solutions	CA268	CA168	CA068	CA968	CA868
69	Thermodynamics, Thermochemistry, and Thermal Properties	CA269	CA169	CA069	CA969	CA869
70	Nuclear Phenomena Crystallization and Crystal Structure	CA270 -	CA170 -	CA070 -	CA970 CA970 PRE 1975	- CA870
71	Nuclear Technology Electric Phenomena	CA271 -	CA171 -	CA071 -	CA971 CA971 PRE 1975	- CA871
72	Electrochemistry Magnetic Phenomena	CA272 -	CA172 -	CA072 -	CA972 CA972 PRE 1975	- CA872
73	Optical, Electron, and Mass Spectroscopy, and Other Related Properties Spectra by Absorption, Emission, Reflection, or Magnetic Resonance, and Other Optical Properties	CA273 -	CA173 -	- CA073	- CA973	- CA873
74	Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes Radiation Chemistry, Photochemistry, and Photographic Processes	CA274 -	CA174 -	- CA074	- CA974	- CA874
75	Crystallography and Liquid Crystals Crystallization and Crystal Structure Nuclear Phenomena	CA275 - -	CA175 - -	- CA075 -	- CA975 CA975 PRE 1975	- - CA875

76	Electric Phenomena Nuclear Technology	CA276 -	CA176 -	CA076 -	CA976 CA976 PRE 1975	- CA876
77	Magnetic Phenomena Electrochemistry	CA277 -	CA177 -	CA077 -	CA977 CA977 PRE 1975	- CA877
78	Inorganic Chemicals and Reactions	CA278	CA178	CA078	CA978	CA878
79	Inorganic Analytical Chemistry	CA279	CA179	CA079	CA979	CA879
80	Organic Analytical Chemistry	CA280	CA180	CA080	CA980	CA880