Current Comments®

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What's in a Cumulation? The Whole Is Greater Than the Sum of Its Parts

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Since its inception in 1963, the *Science Citation Index*® (*SCI*®) has been used for many applications. For instance, sociologists and historians of science have recognized in it a powerful tool for studying trends in the social, cultural, and cognitive structure of science.[1,2] And I've reported to you how we use citation data to identify research fronts for the emerging *ISI Atlas of Science*®.[3] First and foremost, however, the *SCI* is a tool for searching the literature and retrieving information.[4] And it is primarily with this purpose in mind that every five years ISI® issues a cumulation of the annual *SCI*s.

Cumulative Advantages

The word "cumulation" is derived from the Latin word *cumulus*, meaning "mass." The original meaning of the verb "cumulate" is "to gather or pile in a heap."[5] In addition, the word later came to mean "to combine into one" and "to build up by addition of new material." It is in the sense of both these latter definitions that ISI uses the word to refer to its various cumulations (or cums, as we call them).

With the addition of the newly published 1980-1984 cum, the *SCI*'s back-year coverage now includes the 30-year period from 1955 to 1984 and comprises over 9 million articles produced during that span and 131 million works that those articles cited. The 1980-1984 cum alone indexes almost 3 million source articles and contains over 43 million citations. That compares with 2.6 million source articles and 34 million citations in the 1975-1979 cum, reflecting the growth in the scientific literature. The number of citations per article also increased: the average article in the 1975-1979 cum cited a little over 13 references, but in the 1980-1984 cum, the average was a little over 14 references. This innocuous-sounding increase is by no means trivial: it produced an increase of over 3 million citations from the 1975-1979 cum to the 1980-1984 cum.

In the past, libraries benefited from cums partly because cums required less shelf space; the 1965-1969 cum, for example, occupies 50 percent less space than the corresponding annuals for those years. But perhaps the main advantages offered by cums are increased convenience and an increased rate of success in finding desired information. In the first case, the cum saves investigators time by allowing them to survey several years' worth of material in a single set of volumes rather than their having to pore over several annual editions that may be in separate locations. And the chances of finding a particular citation are greatly increased using a cum rather than multiple annual volumes, since new citations have been added to the cums and many inconsistencies in cited references, authors' names, and so on, have been eliminated where possible. As noted by Helen Cargill-Thompson, Andersonian Library, University of Strathclyde, Glasgow, Scotland, a cumulation gives the searcher a better chance of locating bibliographic information on work that is infrequently or irregularly cited.[6] In fact, convenience and success rates were the main factors cited by all the librarians we talked to concerning the advantages of cumulations over sets of annuals. Additionally, retrieval theorists often forget that it may be the objective of a search to determine quickly that a particular work has *not* been cited over a long period.

A.H. Helal, director, Essen University Library, Federal Republic of Germany, noted that "the *Science Citation Index* and its cumulations are of particular value because the source journals selected for coverage are very carefully evaluated before inclusion. A continuous study [by Helal] of user needs and corresponding journal requests has shown that 90 to 95 percent of user needs in the sciences have been met by journal titles included in the *Science Citation Index*."[7]

The 30-year coverage offered by the *SCI* cums is also an important factor in their usefulness. Although at least 25 percent of the citations in a typical year are to recent works—that is, works published in the same year or the two years previous to the citing work[8]—a significant number of works from earlier decades continue to be cited. For instance, at least 10 percent of the citations in current journals are to works published between 1955 and 1964. As I commented in a study of the 250 most-cited articles from that period, most landmark works are still being cited decades after their publication—as are many other, lesser works.[8] Thus, for searchers interested in the work of a given author over a span of years, or in the primordial work in a given field, the retrospective capabilities of the cumulated *SCI*s can be invaluable.

In fact, the coverage and retrospective searching power of the *SCI* cums were significant factors in the decision of Stephanie Normann, director, Library Services, University of Texas Health Science Center at Houston, School of Public Health, to acquire them. The *SCI*'s coverage, she said, provided the library with an instant backlog of reference source material. "Our first students were admitted in the fall of 1969; the library started development in the spring of 1970," Normann said. "We did not have, nor could we afford, volumes of numerous titles of abstracts and indices, and because we're very multidisciplinary, the *Science Citation Index* was the index of choice. Also, the *SCI* gives you a retrospective point of view. Outside of clinical medicine, we don't have any other scientific index that covers the 1955-1964 or prior period. Our users have appreciated the 10-year cum to the extent that we have purchased each subsequent 5-year cum."[9]

As mentioned earlier, another advantage of cums is in helping searchers track developments within a given field. Judie Malamud, acting director, Biomedical Library, University of Pennsylvania, Philadelphia, observed, "It's probably easier to get a broader overview of what's happening in a field [with a cum] than with a yearly [index]."[10] Normann voiced similar sentiments, saying, "It's really much easier to gain a perspective and perceive a trend. You have a 5-year time frame [or 10 years in the case of the 1955-1964 cum] to see the pattern of citations."[9]

Sami Klein, chief, Research and Information Services, US National Bureau of Standards (NBS), Gaithersburg, Maryland, emphasized the usefulness of the cums in finding publications of individual NBS authors. "We're very interested in where NBS authors have been cited," she said. The reason for this interest is twofold. According to Klein, authors employed by the bureau must submit manuscripts for publication to an editorial review board for approval. When an article is published, the author is supposed to give the bureau a reprint so that a citation to it can be included in the NBS publications database. "But," Klein said, "we found that many citations to papers weren't getting in our database, so we use the cums as a check on our records. We also like to see what kind of recognition our authors are getting because to us the bureau is getting recognition that way, also."[11]

Good Things Come in Cumulated Packages

As I said earlier, cums are more than compilations of their corresponding annuals. For instance, the size of the print in the *Citation Index* section of the 1980-1984 cum has been increased 25 percent, making that section easier to read. The cums also contain increased coverage of their respective fields. Once again taking the 1980-1984 cum as an example, 38,000 articles and almost 500,000 cited references included in that cum were not indexed in the annuals for those years. These two factors combine to make the 1980-1984 cum take up a few inches more shelf space than the respective annuals for those years.

The additional articles and references in the 1980-1984 cum come from journals we added, based on bibliographic analyses showing that their impact had increased on their respective disciplines during the years 1980-1984, reaching the thresholds calculated for those fields. Journals added to the *SCI* after 1980 were retrospectively filled in for the years covered in the cum, just as was done for the much-expanded coverage of the 1955-1964 *SCI* cum.[12] And like the annual editions of the *SCI*, each cum has a preface, explanations of terminology and citation indexing, statistical summaries, and sections describing how to use the various indexes. For the convenience of those not yet familiar with the *SCI*, we briefly explain how to use it at the end of this essay. Incidentally, Edward Anders, Enrico Fermi Institute and Department of Chemistry, University of Chicago, Illinois, whose work appears in the examples at the end of the essay, has written a *Citation Classic*® commentary[13] on a paper he published in 1964.[14]

"Value-Added" Improvements

In a recent essay on ISI's *Current Chemical Reactions*® *In-House Database*, I mentioned that value-added information is the subject of growing discussion in the information industry.[15] In the case of the cums, "value-added" mainly refers to unifying variant citations. These result when incomplete or even erroneous bibliographic information about an author's work is given by those who cite that author. Thus, the author's work can be indexed under several different entries. But cums contain unusually large amounts of data compared with individual annual editions; since our unification procedures are more accurate as the available pool of data increases, the cums afford us an opportunity to eliminate some of the inconsistencies in cited references. With the 1980-1984 cum, we have introduced new procedures that improve the consistency of our information even more.

We have also developed procedures for indexing surnames that contain particles, such as "de" or "von." Such names had previously been treated according to the individual author's style, as far as it was possible for us to determine it. In general, capitalized particles were treated as part of the surname and fused with it; lower-case particles were treated like the author's given name and reduced to initials. In 1981, however, the treatment of such names was standardized; now all particles are treated as part of the author's last name. We modified all the data in the 1980-1984 cum to conform with this policy.

Finally, a major accomplishment in the publication of the 1980-1984 cum has been the elimination of the one-year time lag between the production of the *Permuterm*® *Subject Index* and the other three parts of the *SCI*—the *Source*, *Citation*, and *Corporate Indexes*. The delay in previous years was caused by the sheer enormity of the task of compiling and printing the cums. But improved production techniques and a parallel processing scheme now enable us to print the various components of entire cumulations at the same time.

The World Brain

The 1980-1984 *SCI* cum is the latest of a number of cumulations that have been published recently, will soon be published, or are in the planning stages. The *Social Sciences Citation Index*® (*SSCI*®) cums cover five-year intervals from 1966 through 1980, with the 1981-1985 *SSCI* cum ready to be mailed later this year. And the first *Arts & Humanities Citation Index*™ cum, covering the years 1975-1979, is now available.

We are thus making exciting progress toward our goal of indexing the scholarly output of the twentieth century, a goal mentioned in one of my earliest editorials,[16] when I first talked about H.G. Wells's concept of a "World Brain."[17] The World Brain was conceived as a vast encyclopedia that would collect all the world's knowledge in one source.[18] This was one of the founding ideals of the American Society for Information Science (then called the American Documentation Institute), which this year celebrates its 50th anniversary.

But Wells's phrase symbolized the actual information itself. In 1945 Vannevar Bush (1890-1974), professor of electrical engineering at MIT and science adviser to President Franklin Delano Roosevelt, coined the term "Memex" to denote the device through which the World Brain information would be retrieved.[19]

In discussing the specifics of such a device,[20] I noted that the *SCI* could be considered a step toward making Wells's dream a reality.[18,20] Another step toward that goal is the 1945-1954 *SCI* cum, now in the planning and preproduction stages. We look forward to the completion of a full 40 years of *SCI* coverage.

Print Cumulations Are Here to Stay

At the outset of this report I pointed out that the *SCI* and the *SSCI* have been used for many purposes other than searching the literature. The extent of the nonbibliographic uses is hard to measure, but one indicator of the use for performance evaluation[21] is the repeated complaint that the *Citation Index* lists papers and books under the first author only. I have repeatedly reminded readers that the *Source Index* does cover *all* authors and that cross-references are provided for all coauthors. But the evaluators complain that it is too time-consuming to first check the author's *curriculum vitae* or the *SCI Source Index* and then look up individual papers in the *Citation Index*. One solution to this problem would be to expand the *Citation Index* section alone to include coauthors—but were we to do so, its size would be trebled. Instead of 64 volumes in our 1980-1984 cum, we would have well over 100. About 90 of these would be devoted to the *Citation Index*.

Many people think that there must be a technological fix to this problem and point to the *SCI* online. It is true that with *SciSearch*®, the electronic version of the *SCI*, readers may not find it so cumbersome to check the cross-references for the papers of a particular author or department. But the online files of the *SCI* go back only to 1974. The combined entries are not edited and corrected as they are in the print versions, both annual and cumulated. This is because the primary aim of the online *SCI* is to give the user as current a picture of research in a given field as possible; it is not yet feasible to run our time-consuming computer routines for the elimination of errors and the unification of cited references. Those value-added advantages are only cost-effective with the large runs necessary for preparing the printed annuals and cums. So despite the utility of the online version of the *SCI*, the printed cumulations still retain significant, long-term advantages. Not the least of these are corrections to errors called to our attention by authors themselves.

In the near future I will be telling you about new technologies that may affect information storage in the future. We must be prepared to provide our data in a variety of forms, to ensure access to all users in all types of library sites. In spite of widespread use of computers, over 90 percent of users rely on print products. The reasons for the gradual adaptation to new technologies are varied. But the impact of electronic publishing has been quite different from its pioneers' predictions. The full realization of Memex and the World Brain is lurking around the corner, but for most of us it remains science fiction—parallel processing and laser discs notwithstanding.

* * * * *

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How to Use the *Science Citation Index*®

In 1986, the *Science Citation Index*® (*SCI*®) listings reflected the contents of over 3,400 highest-impact journals that published over 620,000 articles. The *SCI* is issued bimonthly and cumulated in annual, 5-year, and 10-year editions.

The *SCI* is a system of four basic indexes.

The *Source Index* is an alphabetic listing of all authors and all papers published during the period covered by the index. Full bibliographic information is provided for each item, including article or book title; journal title, volume, and issue number; full pagination; year of publication; number of references cited; type of article or item; and the author's full address.

The *Citation Index* is an alphabetic listing by first author of cited papers, books, etc. Listed under each cit*ed* item is the condensed citation for each cit*ing* paper.

The *Permuterm*® *Subject Index* (*PSI*) uses words appearing in the titles of books and articles as indexing terms. All significant words in a given title are matched with each of the other significant words in that title to create all possible pairs; each pair then becomes a separate entry in the *PSI*.

The *Corporate Index* consists of two complementary parts. The geographic section is subdivided by country, state or province, city, institution, and department. The alphabetic organization section cross-references each institution with its geographic location.

The following examples, taken from the 1980-1984 cumulated *SCI*, illustrate the versatility of the *SCI* and the depth and currency of its indexing.

To find the most recent information relevant to the 1981 review of "Organic compounds in meteorites and their origins," by R. Hayatsu and E. Anders, turn to the *Citation Index*, illustrated in Figure A. Complete bibliographic information for the citing papers can be obtained from the *Source Index*.

If one knows little about such organic compounds, a search can be started in the *PSI*. As illustrated in Figure B, a check under the main heading of "Meteorites" reveals that it has been used together with numerous other terms. Among these are "achondrites," "crystal," "nuclear," etc., followed in each case by the names of relevant authors. Turn to the *Source Index* for full titles and the rest of the bibliographic information.

To check whether a particular author has published a book or an article in a covered journal during the indexing period, look for the name in the *Source Index*. The *Source Index* provides full bibliographic information for verification. For example, Figure C shows that J. Geiss, 1 of the 16 authors who cite the review by Hayatsu and Anders, published four articles during the 1980-1984 period.

The *Corporate Index* identifies all papers published at a specific institution. For example, Figure D illustrates the hierarchical structure of the geographic index, which permits you to find all the papers published by researchers working in Swiss institutions. The entry for Switzerland is subdivided by city. Under "Bern" you find the University of Bern, where the Institute of Physics is located. The Geiss paper is listed among the dozens of others published by authors at the institute.

A distinct advantage of the *SCI* lies in its multidisciplinary coverage and cross-referencing. For example, biochemistry, physics, and astronomy may all be relevant to the topic discussed by Hayatsu and Anders. Likewise, citations to this work may reveal relationships to other fields.

A detailed, schematic explanation of search techniques appears in the front matter of each issue. A complete "guide" and journal list are printed separately each year.

Selected, Edited Sample Entries from the 1980-1984 *Science Citation Index*® (*SCI*®)

Figure A: Sample entry from the *SCI*'s *Citation Index*.

HAYATA T						
77 ACTA PATHOL JAPON 27 137						
BARTH J	F RONT NUKL		136	669	82	
BLEISCH VR	CANCER		46	314	80	
IWASAKI I	ACT PAT JPN		34	863	84	
PAIN JA	EUR J RESP		65	139	84	
PAULSEN SM	J SUBMIC CY		15	811	83	
81 DIAGN GYNECOL OBSTET 3 309						
FENOGLIO CM	NY ST J MED		83	293	83	
"	PATH RES PR		174	257	82	
GREISLER HP	ARCH SURG		117	1425	82	
HAYATSU E						
74 JAP J VET SCI 36 311						
CHHABRA PC	AVIAN DIS		25	279	81	
HAYATSU E	MICROB IMMU		24	585	80	
"	"		25	1255	81	
HOWARD CJ	RES VET SCI		28	242	80	
LAM KM	VET MICROB	N	9	509	84	
LIN MY	AVIAN DIS		28	79	84	
YAYOSHI M	MICROB IMMU		28	303	84	
"	YALE J BIOL		56	685	83	
YODER HW	AVIAN DIS		28	224	84	
75 AM J VET RES 36 217						
LAM KM	AVIAN DIS		27	803	83	
"	J COMP PATH		94	1	84	
"	VET MICROB	N	9	509	84	
LIN MY	AVIAN DIS		28	88	84	
YODER HW	"		28	224	84	
78 MICROBIOL IMMUNOL 22 181						
CHANDLER DK	INFEC IMMUN		38	604	82	
GOURLAY RN	ADV VET SCI	R	26	289	82	
HAYATSU E	MICROB IMMU		24	585	80	
"	"		25	1255	81	
HOWARD CJ	RES VET SCI		28	242	80	
SASAKI T	J CLIN MICR		18	1167	83	
YAYOSHI M	MICROB IMMU		28	303	84	
"	YALE J BIOL		56	685	83	
YOSHIDA A	ACT OTO-LAR		94	141	82	
Cited Author—**HAYATSU R**						
68 GEOCHIM COSMOCHIM AC 32 175						
HAYATSU R	T CURR CHEM	R	99	1	81	
LAVRENTI GA	DAN SSSR		267	756	82	
"	ORIGIN LIFE		14	205	84	
LAZCANO A	PRECAMB RES	R	20	259	83	
NORRIS TL	EARTH PLAN		47	43	80	
PONNAMPE C	ACS SYMP S		176	391	82	
"	ORIGIN LIFE	R	12	9	82	
STOKS PG	GEOCH COS A		45	563	81	
71 GEOCHIM COSMOCHIM AC 35 939						
BAHN PR	BIOSYSTEMS		14	3	81	
CRONIN JR	J MOL EVOL		17	265	81	
FOX SW	BIOSYSTEMS		12	155	80	
"	INT J QUANT			195	82	
"	PRECAMB RES		23	1	83	
HAYATSU R	T CURR CHEM	R	99	1	81	
KUNG CC	EARTH PLAN		46	141	79	
LAZCANO A	PRECAMB RES	R	20	259	83	
PONNAMPE C	ORIGIN LIFE	R	12	9	82	
STOKS PG	GEOCH COS A		45	563	81	
75 GEOCHIM COSMOCHIM AC 39 471						
HAWKER JR	J MOL EVOL		17	265	81	
HAYATSU R	T CURR CHEM	R	99	1	81	
LAWLESS JG	BK# 14917		18	19	80	
MURTY SVS	GEOCHEM J		17	165	83	
NEWMAN DS	J ELCHEM SO		131	1079	84	
PONNAMPE C	ACS SYMP S		176	391	82	
STOKS PG	GEOCH COS A		45	563	81	
"	"		46	309	82	
75 NATURE 257 378						
DUTY RC	FUEL		60	83	81	
"	"	L	60	534	81	
HAYATSU R	"		60	77	81	
"	"	L	60	158	81	
MAHLE NH	CHEMOSPHERE		9	693	80	
OUCHI K	J SYN ORG J	R	38	451	80	
PARK SM	J ELCHEM SO	R	131	C363	84	
SIMS RC	RESIDUE REV	R	88	1	83	
SLOANE TM	COMB FLAME		38	89	80	
SPIRO CL	SCIENCE		226	48	84	
TAYLOR ND	FUEL		59	499	80	
WIJAYARA RD	MAR ENV RES		11	77	84	
YURUM Y	FUEL		61	1136	82	
77 GEOCHIM COSMOCHIM AC 41 1325						
ALAERTS L	GEOCH COS A		44	189	80	
BASILE BP	ORG GEOCHEM		5	211	83	
FREUND F	GEOCH COS A		44	1319	80	
GEISS J	ASTRON ASTR		93	189	81	
HAYATSU R	FUEL		60	77	81	
"	SCIENCE		207	1202	80	
"	"		209	1515	80	
"	T CURR CHEM	R	99	1	81	
KUNG CC	EARTH PLAN		46	141	79	
LEWIS RS	METEORITICS	M	16	349	81	
MATSUDA JI	GEOCH COS A		44	1861	80	
OTT U	"	R	45	1751	81	
ROBERT F	"		46	81	82	
SANDFORD SA	ICARUS		60	115	84	
STOKS PG	GEOCH COS A		45	563	81	
"	"		46	309	82	
TALBOT RJ	INTERD SCI	R	5	102	80	
VIEIRA VWA	PHYS SCR		27	437	83	
WHITTAKE AG	SCIENCE		209	1512	80	
78 FUEL 57 541						
ALEXANDE G	J CHROMAT		217	19	81	
BALABANO EM	DAN BOLG		35	351	82	
BARRICK RC	ENV SCI TEC		18	846	84	
BARTLE KD	ANALYT CHEM	R	54	1730	82	
BARUAH MK	CURRENT SCI	N	53	1242	84	
BOUDOU JP	GEOCH COS A		48	2005	84	
BULARZ K	CHEM ANAL		29	193	84	
CHAFFEE AL	GEOCH COS A		47	2141	83	
DESYPRIS J	FUEL		61	807	82	
DUTY RC	"		59	97	80	
"	"	L	60	534	81	
GRIGSON SJW	"		62	695	83	
HAYATSU R	"		60	77	81	
"	"	L	60	158	81	
"	SCIENCE		207	1202	80	
KIDO A	BUNSEKI KAG		32	E 41	83	
KING HH	FUEL		61	257	82	
MILLER DJ	"		60	370	81	
79 NATURE 278 41						
HAYATSU R	FUEL		60	77	81	
"	ORG GEOCHEM		6	463	84	
"	SCIENCE		207	1202	80	
PARK SM	J ELCHEM SO	R	131	C363	84	
SCHEEL D	PLANTA		152	253	81	
ZEIKUS JG	ADV MICR EC	R	5	211	81	
81 FUEL 60 158						
BARROWS RD	FUEL		63	4	84	
HAYATSU R	"	L	60	161	81	
"	ORG GEOCHEM		6	463	84	
HESSLEY RK	FUEL		61	1085	82	
ROBERTS RM	"		63	904	84	
SAIZJIME C	SOIL SCI		136	65	83	
STOCK LM	FUEL	N	62	974	83	
Cited Paper—**81 TOPICS CURRENT CHEM 99 1**						
ARDEN JW	GEOCH COS A		48	1899	84	Citing Papers
BRADLEY JP	SCIENCE		223	56	84	
CHRISTOF R	"		222	1327	83	
GEISS J	GEOCH COS A	R	46	529	82	
HAYATSU R	METEORITICS	M	18	310	83	
IRVINE WM	ORIGIN LIFE		14	15	84	
KERRIDGE JF	EARTH PLAN		64	186	83	
KIESL W	CRC C R ANA	R	15	119	84	
LEWIS RS	SCI AM		249	66	83	
MATTHEWS HE	NATURE		310	125	84	
PLEASANT LG	ORIGIN LIFE	R	13	61	83	
SANDFORD SA	ICARUS		60	115	84	
SCHLESIN G	J MOL EVOL		19	376	83	
VIEIRA VWA	PHYS SCR		27	437	83	
YANG J	GEOCH COS A		47	2199	83	
YUEN G	NATURE		307	252	84	
HAYCOCK DE						
78 J CHEM SOC DALTON 1785						
BRYTOV IA	GEOKHIMIYA			849	84	
FUGGLE JC	J ELEC SPEC		26	111	82	
HUBBERST P	COORD CH RE	R	30	52	79	
MASSEY AG	ANN RP CH A	R	75	165	78	
78 J CHEM SOC DALTON 1791						
BRYTOV IA	GEOKHIMIYA			849	84	
HART FA	ANN RP CH A	R	75	157	78	
HUBBERST P	COORD CH RE	R	30	52	79	
79 J CHEM SOC F2 75 1692						
DRAGER G	PHYS ST S-B	R	124	11	84	
GARNER CD	COORD CH RE	R	45	153	82	
KAUTEK W	BER BUN GES		84	1034	80	
"	PHYS ST S-B		122	651	84	
MULLER W	PHYS LETT A		98	66	83	
SIMUNEK A	PHYS REV B		30	923	84	
SPAH R	APPL PHYS L		45	744	84	
YARMOSHE YM	J ELEC SPEC		32	103	83	
82 J PHYS E 15 40						
ALKADIER MA	J CHEM S F2		80	669	84	
HAYDAY A						
81 GENE 15 53						
CREMISI C	J CELL PHYS		116	181	83	
MAY E	J VIROLOGY		45	901	83	
MONAHAN JJ	ANNU REP M	R	17	229	82	
82 J VIROL 44 67						
BULLOCK P	J MOL BIOL		174	55	84	
CHOWDHUR K	J VIROLOGY		48	40	83	
DOERFLER W	CURR T MICR	R	109	193	83	
FRIED M	P NAS BIOL		80	2117	83	
GALMANN R	VOP VIRUSOL	R		399	84	
GRIFFIN BE	ADV CANC R	R	39	183	83	
HAYDAY AC	J VIROLOGY		45	693	83	
POMERANT BJ	MOL CELL B		3	1680	83	
REYBELLE V	J VIROLOGY		50	587	84	
RULEY HE	NATURE		304	181	83	
SCHULZ M	NUCL ACID R		12	4959	84	

Figure B: Sample entry from the *SCI*'s *Permuterm® Subject Index*.

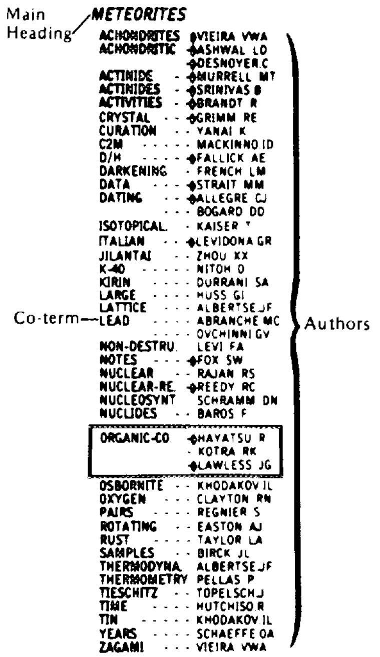

Figure C: Sample entry from the *SCI*'s *Source Index*.

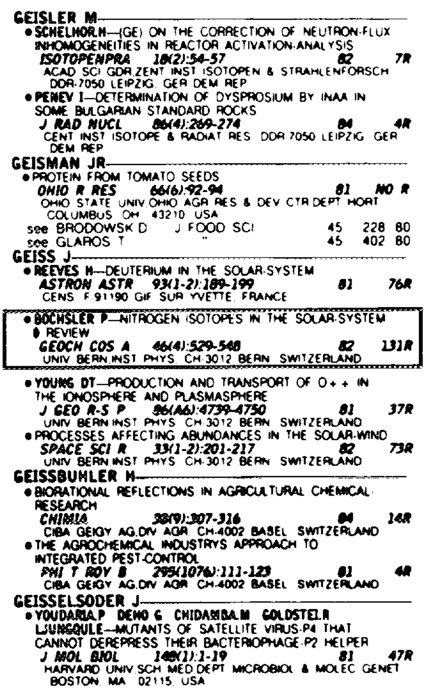

Figure D: Sample entry from the *SCI*'s *Corporate Index*, geographic section.