Chem 634, Advanced Organic Chemistry- Synthesis and Reactivity Prof. Joseph Fox

Chemical Database Searching- Handout 1

Science Citation Searching using ISI Web of Science

The purpose of this tutorial is to learn how to do a cited reference search on Web of Science

In this exercise, we are going to look up all of the papers that cite:

Herman Richey (and coworkers), *The Journal of Organic Chemistry*, **1980**,45, 5036

Note that we are beginning this search with limited info-we do not remember the names of the coauthors on this paper, and we do not remember if Richey has a middle initial in his name

- 1. Go to: http://isi10.isiknowledge.com/portal.cgi/wos
- 2. Click "Full Search"
- 3. Click Cited Reference Search"
- 4. This brings you to the page below. It is important that you use the correct journal title when searching! Do this by clicking on "List" (see below)



Cited Reference Search

STEP 1: CITED REFERENCE LOOKUP

Enter terms or phrases separated by OR. Then press LOOKUP.

Display list of cited references containing terms entered below.

CITED AUTHOR: Enter the cited author name(s) as O'BRIAN C* OR OBRIAN C*

CITED WORK: Enter abbreviated title as J COMPUT APPL MATH* using the list as a guide

CITED YEAR: Enter year Cited Work was published as 1946 OR 1947



Display list of cited references containing terms entered above.

CLEAR

Clear all search terms entered above.

5. Navigate under the letter "J" to "Journal of Organic Chemistry" Note that the abbreviation is "J ORG CHEM". Thus, typing "JOC" or "J. ORG. CHEM." will not work. See below

ISI Web of SCIENCE [®] Powered by ISI Web of Knowledge _{SM}
Conline Help
J OPTIMIZ THEORY APP
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS
J OPTOELECTRON ADV M
JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY
J ORAL MAXIL SURG
JOURNAL OF ORAL PATHOLOGY & MEDICINE
J ORAL PATHOL MED
JOURNAL OF ORAL REHABILITATION
J ORAL REHABIL
JOURNAL OF ORAL SURGERY
J ORAL SURG
JOURNAL OF ORAL THERAPEUTICS AND PHARMACOLOGY
J ORAL THER PHARMACO
JOURNAL OF ORGANIC CHEMISTRY
J ORG CHEM
JOURNAL OF ORGANIZATIONAL BEHAVIOR
J ORGAN BEHAV
JOURNAL OF ORGANIZATIONAL BEHAVIOR MANAGEMENT

6. Hit the 'back button' twice to return to the earlier screen, and type the info shown below. Note that, because we are unsure of the author's middle name, we use an *. Hit the 'Lookup' button

STEP 1: CITED REFERENCE LOOKUP

Enter terms or phrases separated by OR. Then press LOOKUP.

LOOKUP Display list of cited references containing terms entered below.

CITED AUTHOR: Enter the cited author name(s) as O'BRIAN C* OR OBRIAN C* Richey H*

CITED WORK: Enter abbreviated title as J COMPUT APPL MATH* using the list as a guide J ORG CHEM

CITED YEAR: Enter year Cited Work was published as 1946 OR 1947 1980

LOOKUP Display list of cited references containing terms entered above.

Clear all search terms entered above.

7. We see that there are several papers in 1980. Click on the reference that begins on page 5036.

STEP 2: CITED REFERENCE SELECTION

The table lists all of the cited references that match your search request and the number of times each variation has been cited. Sele variants) by clicking the checkboxes or SELECT PAGE. Then press SEARCH. The search is added to the <u>Search History</u>.

Set language and document type limits.

SELECT PAGE or select specific references from list.

SEARCH to find articles that cite selected references.

References 1 4							
	Hits	Cited Author	Cited Work	Volume	Page	Year	ID
	20	RICHEY HG	J ORG CHEM	45	5027	1980	
	17	RICHEY HG	J ORG CHEM	45	5036	1980	
	1	RICHEY HG	J ORG CHEM	45	5040	1980	
	16	RICHEY HG	J ORG CHEM	45	5042	1980	

Note: Hits are for all references -- not just for the current database and year selections.

8. Now we get a lot of information. Authors, affiliation, title, journal reference, etc. We can also view the works referenced in this paper by hitting the "Cited References" button. More importantly, we can find out who has cited this work. Do this by hitting "Times Cited"

ISI Web of SCIENCE [®] Powered by ISI Web of Knowledge _{5M}								
Cited ReferencesFull Record								
Article 1 of 1								
STEREOCHEMISTRY OF ADDITION OF ALLYLIC GRIGNARD-REAGENTS TO 3-(HYDROXYMETHYL)CYCLOPROPENES								
RICHEY HG, BENSION RM								
45 (25): 5036-5042 1980								
Document type: Article Language: English <u>Cited</u> <u>References: 47</u> <u>Times</u> <u>Cited: 17</u> FIND RELATED RECORDS <u>Explanation</u>								
Addresses: RICHEY HG, PENN STATE UNIV,DEPT CHEM,UNIVERSITY PK,PA 16802								
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036								
IDS Number: KT373								

ISSN: 0022-3263

9. This brings us to the citing articles summary. From here, we can click on an article that cited the JOC 1980 paper, and find out information on that work. For example, we can click on the work by Kisanga

ISI Web of KNOWLEDGE [™]	ISI Web of Science	GO	Home	Log out				
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Citing ArticlesSummary <u>STEREOCHEMISTRY OF ADDITION OF ALLYLIC GRIGNARD-REAGENTS TO</u> <u>3-(HYDROXYMETHYL)CYCLOPROPENES</u> RICHEY HG, BENSION RM JOURNAL OF ORGANIC CHEMISTRY 45 (25): 5036-5042 1980								
SUBMIT MARKS MARK PAGE MARK ALL	the above article: Resul	lts Page 1 (Articles 1	10):					
Use the checkboxes to add individual articles to the Marked List. Be sure to click SUBMIT MARKS button before leaving page. Araki S, Tanaka T, Toumatsu S, et al. <u>A new synthesis of pyrroles by the condensation of cyclopropenes and nitriles mediated by gallium(III) and indium(III)</u> <u>salts</u> ORG BIOMOL CHEM 1 (22): 4025-4029 2003								
Pearson AJ, Kim JB Conjugate additions of carbon nucleophiles to cyclopentadienones ORG LETT 5 (14): 2457-2459 JUL 10 2003								
Liao LA, Fox JM <u>A copper-catalyzed method for the facially selective addition of Grignard reagents to cyclopropenes</u> J AM CHEM SOC 124 (48): 14322-14323 DEC 4 2002								
☐ Kisanga PB, Verkade JG <u>P(RNCH2CH2)(3)N-catalyzed</u> J ORG CHEM 67 (2): 426-430	1.2-addition reactions of acti JAN 25 2002	ivated allylic synthons		A				
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10. Now we can find out info on this article. Notice that the abstract information is included because this is a recent article.

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Article 4 of 17	The GET ARTICLE								
P(RNCH2CH2)(3)N-catalyzed 1,2-addition reactions of activated allylic synthons Kisanga PB, Verkade JG JOURNAL OF ORGANIC CHEMISTRY 67 (2): 426-430 JAN 25 2002									
Document type: Article Language: English Cited References: 61 Times Cited: 7	D RELATED RECORDS Explanation								
Abstract: Activated allylic compounds of the type RCH:CHCH(2)Z ($Z = CN$, CO2Me) react efficiently with aromatic aldehydes in the presence of 20-40 mol % of P(R'NCH2CH2)(3)N at -94 to -63 degreesC. Both R = H and R = Me lead exclusively to a-addition products. When R = H and Z = CN, an allylic transposition occurs to afford a Baylis-Hillman product as the only product.									
KeyWords Plus: BAYLIS-HILLMAN REACTION, ASYMMETRIC NITROALDOL REACTION, KNOEVI CONDENSATION, ALDOL REACTIONS, HENRY REACTION, ALDEHYDES, ESTER: COMPLEXES	ENAGEL S, ANIONS, ALPHA,								
Addresses: Verkade JG, Albany Mol Res Inc, Syracuse Res Ctr, 7001 Performance Dr, Syracuse, NY 1321 Iowa State Univ, Dept Chem, Ames, IA 50010 USA	2 USA								
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA									
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