#### Chemistry Research Guide Noelle Ebert, Information Resources and Instructional Librarian

Library: M-F 10-6, Tioga 2, 541-888-7270, library@socc.edu, www.socc.edu/library, Zoom available!

#### **Evaluating Resources**

- Authority Is the author knowledgeable? Does the author have professional/academic experience?
- Accuracy Did you find any errors? If so, there could be more your missed.
- Objectivity Is there any bias? Does the author represent multiple points of view?
- Currency Is this information up to date? How fast does information change in this field?
- Audience Who did the author have in mind for this content? What tone and style did the author use?

#### **Search Tools and Strategies**

- <u>Boolean (AND, OR, NOT)</u> Searching method that helps widen or narrow your list of results.
- Citation info EBSCO and Gale databases will provide your bibliography citations for you.
- CTRL + F This keyboard command will let you search for keywords in a document or website.
- <u>Help video playlist</u> SWOCC Library instructional videos.
- Interlibrary Loan We can order books, articles, and movies from libraries outside the Coastline system.
- Limiters Filters in databases to help narrow your results such as: full text, peer review, and date range.
- Listing search terms Make a note of useful terms and phrases to organize your database searching.
- Publication Finder A special database that tells you if we have full-text access to a journal or eBook.
- "Quotation marks" You can search for an entire phrase as stated if you put it in quotation marks.
- References in great articles The bibliography in a useful article can give you leads to other sources.
- Search multiple databases at once You can cross search in many EBSCO and Gale databases.
- Truncat\* -- Searching the root of a word can expand your results (truncate, truncating, truncation, etc.)

# **General Websites**

- Lifehacker <u>infographic</u> on searching Google
- Mashable <u>infographic</u> on searching Google
- Purdue Online Writing Lab

# Physical Materials (books and movies)

- SWOCC Library is part of the Coastline Library Network in Coos and Curry Counties.
- SWOCC students and staff can apply for a Coastline library card <u>here</u>.
- Browse and order items on the <u>Coastline catalog website</u>.
- This <u>help video</u> will show you the basics of navigating the catalog.

# Academic Databases

- Available on and off campus.
- Log in with your 7-digit SWOCC student ID number.
- If your ID doesn't contain 7-digits, add zeros to the beginning until it does (123456 = 0123456).
- These specific databases will be useful for your assignments. You can filter your results to show only peer-reviewed articles by using the limiters suggested to you on the side of the results page.
  - o <u>Academic OneFile</u> (help video <u>here</u>)
  - o <u>Academic Search Complete</u> (help video <u>here</u>)
  - o <u>EBSCO Academic eBook</u> and <u>EBSCO Community College eBook</u> Collections (help video <u>here</u>)
  - o <u>Science Reference Center</u>

# Journals

- The following chemistry journals have articles that are all peer-reviewed. Each title is followed by 1) a description, 2) the database that has access to it, and 3) the span of years we can read articles in full text.
- You can search the databases for journal titles by selecting "journal name" or "publication title" in the dropdown menu near the search box.
  - AMBIX: The Journal of the Society for the History of Alchemy and Chemistry
    - Facilitates the publication of high-quality research & discussion in all aspects of the history of alchemy & chemistry, including the chemical industry.
    - Academic Search Complete
    - 03/01/2004 present (Full Text Delay: 1 year)
  - o Annual Review of Physical Chemistry
    - Provides primary research to identify the principal contributions in the field of physical chemistry.
    - Academic Search Complete
    - 05/01/1996 05/01/2005
  - Bulletin of Chemical Reaction Engineering and Catalysis
    - Discusses research and news relating to chemical reaction engineering and catalysis engineering.
    - Academic Search Complete
    - 06/01/2009 present
  - Canadian Journal of Chemistry
    - Publishes research articles & reviews by contributors in analytical, inorganic, organic & physical-theoretical chemistry. Articles on electrochemistry, surface chemistry, theoretical chemistry, bio-syntheses, physical organic chemistry, bioorganic.
    - Academic OneFile
    - 01/01/1999 present (Full Text Delay: 1 year)
  - o ChemCatChem
    - Covers heterogeneous and homogeneous catalysis as well as biocatalysis.
    - <u>Academic Search Complete</u>
    - 05/09/2011 present (Full Text Delay: 1 year)
  - Chemical Sciences Journal
    - Covers all areas of chemistry, including analytical, inorganic, organic, industrial, environmental and applied chemistry, especially the thrust areas of chemistry research and applications.
    - <u>Academic OneFile</u>
    - 01/01/2010 12/31/2012
  - o Chemistry and Ecology
    - Focuses on the relationship between chemistry and ecological processes.
    - Academic Search Complete
    - 07/01/2002 present (Full Text Delay: 18 months)
  - o ChemPlusChem
    - Covers topics in chemical & molecular sciences.
    - <u>Academic Search Complete</u>
    - 04/01/2012 present (Full Text Delay: 1 year)
  - Clinical Chemistry
    - International journal of clinical laboratory science, providing 2,000 pages per year of peer-reviewed papers that advance the science of the field.
    - <u>Academic OneFile</u>
    - 01/01/1997 present (Full Text Delay: 1 year)
  - E-Journal of Chemistry
    - An international quarterly research journal of chemistry.
    - <u>Academic Search Complete</u>
    - 07/01/2009 04/01/2012

- Foundations of Chemistry
  - Provide an interdisciplinary forum where chemists, biochemists, philosophers, historians, educators & sociologists with an interest in foundational issues can discuss conceptual & fundamental issues which relate to the `central science' of chemistry.
  - <u>Academic Search Complete</u>
  - 05/01/2003 present (Full Text Delay: 1 year)
- o Geochemical Transactions
  - Covers organic & inorganic chemistry, marine & aquatic chemistry, chemical oceanography, biogeochemistry, astrobiology, environmental geochemistry and related fields.
  - <u>Academic Search Complete</u>
  - 01/01/2000 present
- International Journal of Analytical Chemistry
  - Publishes original research on all areas of analytical chemistry.
  - Academic Search Complete
  - 01/01/2009 present
- International Journal of Applied Chemistry
  - Publishes original research papers from applied Chemistry and their broad range of applications. This title is no longer being covered by EBSCO and we are unable to acquire any missing content.
  - <u>Academic OneFile</u>
  - 01/01/2007 01/01/2013
- o Journal of Atmospheric Chemistry
  - Devoted to the study of the chemistry of the Earth's atmosphere, the emphasis being laid on the region below about 100 km.
  - <u>Academic Search Complete</u>
  - 01/01/2003 present (Full Text Delay: 1 year)
- Journal of Chemical Research
  - Publishes research papers and review articles in all branches of experimental chemistry, with some specialty in organic synthetic methods.
  - Academic Search Complete
  - 12/01/2009 12/01/2018
- Journal of Chemical Sciences
  - Publishes original research articles and rapid communications, covering all areas of chemical sciences.
  - <u>Academic Search Complete</u>
  - 07/01/2006 present (Full Text Delay: 1 year)
- o Journal of Chemistry
  - <u>Academic Search Complete</u>
  - 01/01/2013 present
- o Journal of Mathematical Chemistry
  - Includes results which use non-routine mathematical methodologies and papers on novel applications of more familiar mathematical techniques and analyses of chemical problems which indicate the need for new mathematical approaches.
  - <u>Academic Search Complete</u>
  - 01/22/2008 present (Full Text Delay: 1 year)
- Journal of Molecular Evolution
  - Features articles in several fields, including biogenetic evolution, evolution of informational macromolecules, and evolution of genetic control mechanisms, among others.
  - <u>Academic Search Complete</u>
  - 04/01/2003 present (Full Text Delay: 1 year)

- Main Group Chemistry
  - Covers the fields of chemistry, engineering, biology and materials research.
  - <u>Academic Search Complete</u>
  - 03/01/2005 present (Full Text Delay: 1 year)
- o Molecules: A Journal of Synthetic Organic Chemistry and Natural Product Chemistry
  - Discusses synthetic organic chemistry and natural product chemistry.
    - <u>Academic Search Complete</u>
    - 03/01/2009 present
- Nature Chemistry
  - Peer-reviewed coverage of topics in analytical, inorganic, organic and physical chemistry as well as related fields.
  - <u>Academic Search Complete</u>
  - 04/01/2009 12/01/2015
- Nature methods
  - Forum for the publication of novel methods and significant improvements to tried-and-tested techniques in the life sciences and related area of chemistry.
  - Academic OneFile
  - 10/01/2004 present (Full Text Delay: 1 year)
- Orbital: The Electronic Journal of Chemistry
  - Publishes articles that focus on all areas of Chemistry and their interfaces with Pharmacy, Biology, and Physics.
  - <u>Academic OneFile</u>
  - 01/01/2009 present
- o Theoretical and Experimental Chemistry
  - Covers all aspects of chemical theory including quantum chemistry, chemical thermodynamics, theory of solutions, surface phenomena, & chemical physics.
  - <u>Academic Search Complete</u>
  - 05/01/2003 present (Full Text Delay: 1 year)
- o Theoretical Chemistry Accounts
  - Covers theoretical chemistry, chemical physics, quantum chemistry, gas phase dynamics, structure and dynamics of condensed phases, statistical mechanics.
  - Academic Search Complete
  - 04/01/2003 present (Full Text Delay: 1 year)