Research & Writing Resources

ENCS 6721 - Summer 2019

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Today

Library website and resources

Organizing your research: Zotero

Finding the latest research

Finding and using other resources (e.g. books, standards/codes, patents)

Citing sources (e.g. papers, books, software, images)

Getting help

Slides: http://bit.ly/2JJW0Cn

Library web site and resources

library.concordia.ca

Key resources

- **ENCS Subject Guide:** Help & How-To -> Subject & course guides -> Engineering & Computer Science
  - Links to databases, books, ebooks, data, standards, technical reports, etc.
  - Handbooks, encyclopedias, and dictionaries ← *good for terminology!*
  - Course and project guides
  - Writing and citation guides (IEEE, RefWorks)
  - Librarian contact information

- **Concise Dictionary of Engineering**, Ron Hanifan (ebook) clues.concordia.ca/record=b3197439
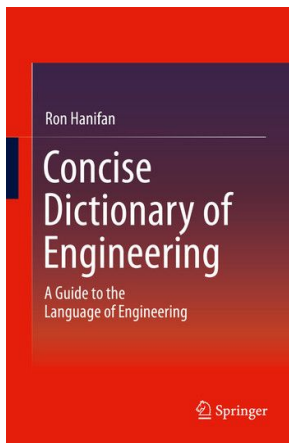
Organizing your research

zotero

What is Zotero?

article from the Compendex DB

conference paper from IEEE Xplore DB

Google Scholar search results

book from library catalogue

Zotero gives you this
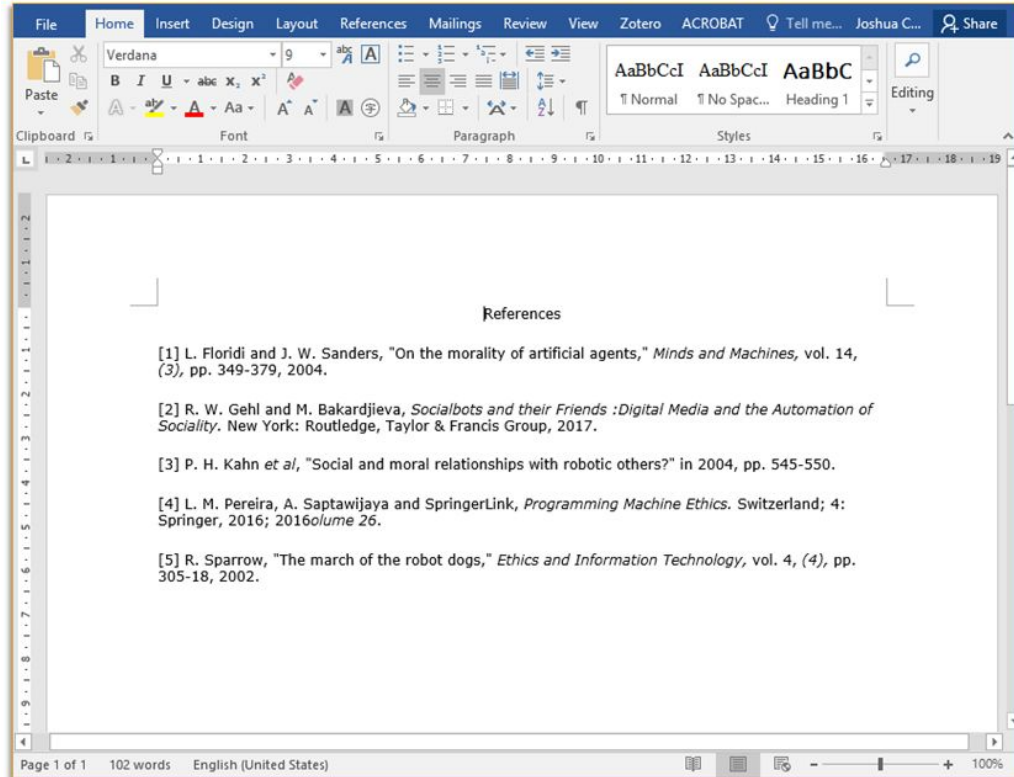
Activity 1: Zotero Setup

1) Register https://www.zotero.org

2) Start the desktop application & go to the **Tools** menu

3) Check that the Browser Connector for Chrome is installed

4) Check that the Add-on for Microsoft Word is installed

Help: lib-citation@concordia.ca

https://www.zotero.org/support/

Finding the latest research

Where is the most up-to-date research published?

Conference papers

Peer-reviewed articles in scholarly journals

Open access repositories

Books/ebooks (slower publication cycle, often more theoretical)

How to find and access research?

Library catalogue

IEEE Xplore

Engineering Village (Compendex + INSPEC)

Repositories (e.g. arXiv, Spectrum)

Google Scholar
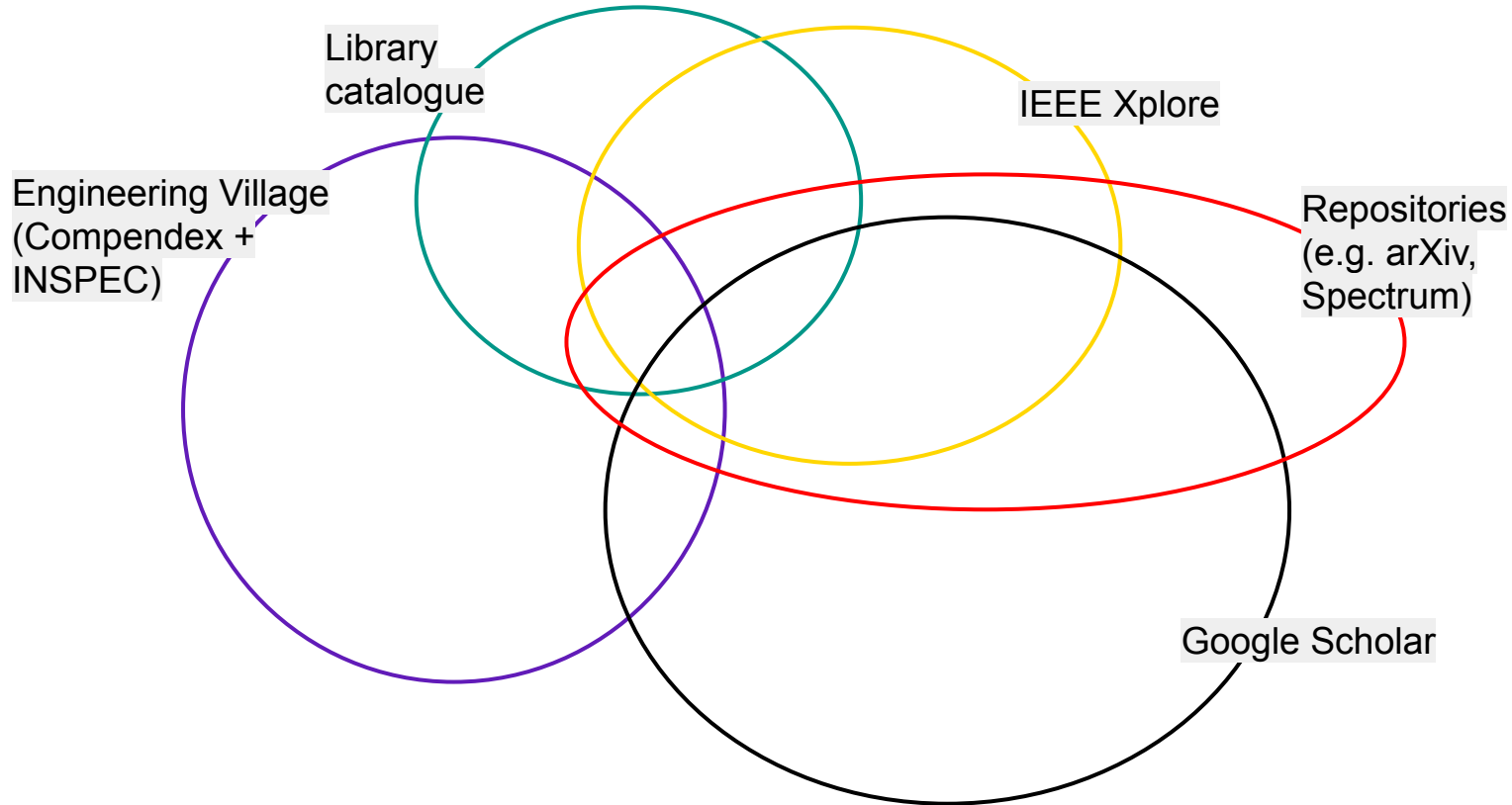
Resources available via Concordia Library

- Bibliographic databases (citations/abstracts)
  - [Compendex]() ← *General engineering; via Engineering Village*
  - [INSPEC]() ← *Electrical, computer & mechanical; via Engineering Village*
  - [Aerospace and High Technology]() ← *Aerospace*

- Full text databases (full papers)
  - [IEEE Xplore]() ← *Electrical & computer*
  - [ACM Digital Library]() ← *Computer*

Always **connect to these databases through the library website**, especially when off-campus, to avoid paywalls and difficulties with accessing content!

…what about after I graduate?

Open access repositories

- [arXiv](#) (Cornell University pre-print archive)
- [OSF Preprints](#) (pre-print repositories for many disciplines)
- [Federal Science Library](#) (Canadian and other documents or data)
- [Unpaywall](#) (Chrome/Firefox extension that will search a large database of over 24 million open access repositories to find free and open copies of paywalled scholarly articles)

Keeping up with the field

- [IEEE Spectrum](#)
- [MIT Technology Review](#)

Deciding what to look for and finding it

Choosing your research question

consumer buying habits
product lifecycle
employment
— industry & market

environment
neighboring cities
citizens
health
— impact

Electronic waste in China

electronic waste —
disposal
recycling
hazardous waste
waste management
facilities

China —
Asia
manufacturing centres
policies
manufacturing regulations
— Guiyu
Tianjin

A question to guide our search

How does electronic waste recycling affect citizens living in Guiyu, China?

how does electronic waste recycling affect students living in Guiyu China

About 611 results (0.11 sec)

My profile

Any time
Since 2019
Since 2018
Since 2015
Custom range...

Sort by relevance
Sort by date

☑ include patents
☑ include citations

✉ Create alert

Environmental, social, and economic implications of global reuse and recycling of personal computers

[PDF] academia.edu

E Williams, R Kahhat, B Allenby… - … science & technology, 2008 - ACS Publications

… The significantly lower price of used goods **can** make the difference between access **and** … Growth of informal **recycling** informal reuse/**recycling is** economically driven because it runs a net profit … Socially, computers **are** of particular importance vis a vis their enabling role in using …

☆ 〟 Cited by 294   Related articles   All 15 versions

Informal electronic waste recycling: a sector review with special focus on China

[PDF] psu.edu

X Chi, M Streicher-Porte, MYL Wang, MA Reuter - **Waste Management**, 2011 - Elsevier

… While literature sources **do** not provide much information about **how** informal recyclers **are** interacting or … **What can** no longer be reused **is** dismantled manually, **and** then treated in unqualified … Consequently, qualified recyclers **are** in danger of making losses, as the total burden …

☆ 〟 Cited by 386   Related articles   All 12 versions

Heavy metals concentrations of surface dust from e-waste recycling and its human health implications in southeast China

[HTML] acs.org

AOW Leung, NS Duzgoren-Aydin… - … science & technology, 2008 - ACS Publications

… As the composition of settled dust **is** similar to atmospheric suspended particulates, it **can** be an … Children **are** usually exposed to greater amounts of dust than adults as a result of pica **and** … Exposure to high levels of heavy metals **can** result in acute **and** chronic toxicity, such as …

☆ 〟 Cited by 433   Related articles   All 9 versions

The electronics revolution: from e-wonderland to e-wasteland

[PDF] usp.br

OA Ogunseitan, JM Schoenung, JDM Saphores… - …, 2009 - science.sciencemag.org

… The **Electronics** Revolution: From E-Wonderland to E-Wasteland … 3 Department of Civil **and** Environmental Engineering **and** Department of Economics, University of California … 4 Department of **Electrical** Engineering **and** Computer Science, University of California, Irvine, CA …

☆ 〟 Cited by 160   Related articles   All 13 versions

[PDF] Key social **impacts** of **electronics** production **and** WEEE-**recycling** in

[PDF] oeko.de

No results from over 22 million records?!?

Identify key concepts

How does electronic waste recycling affect citizens living in Guiyu, China?

Need for synonyms and related terms

Need for synonyms and related terms

Search ⌄   Results ⌄ 1   Alerts 0   Selected records 0   More ⌄   ❔⌄   🏛⌄   Create account

Thesaurus search: Exact term ⌄   for   Recycling

Database: 🔘 Compendex   ⚪ Inspec   ⚪ GEOBASE

Search index 🔍

Exact term results ⌃

Recycling

☐ Recycling 🗗

Broader terms	Related terms	Narrower terms
☐ Reclamation	☐ Ecodesign	☐ Deinking
	☐ Electronic Waste	☐ Plastic recycling
	☐ Energy conservation	☐ Water recycling
	☐ Refining	
	☐ Reusability	
	☐ Waste management	
	☐ Waste paper	
	☐ Waste utilization	

Selected term(s) ❯

Select term by using the checkboxes or find additional terms by clicking on the term...

⚪ AND
🔘 OR

Reset form   🔍

Date ⌄   Document type ⌄   Language ⌄   Discipline ⌄   Treatment ⌄   Sort by ⌄

Creating a search strategy

How does electronic waste recycling affect citizens living in Guiyu, China?

Simple

Concept 1 AND Concept 2

Concept 1 AND Synonym 2

Creating a search strategy

How does electronic waste recycling affect citizens living in Guiyu, China?

Advanced

Concept 1 OR Synonym

AND Concept 2 OR Synonym

AND Concept 3 OR Synonym

Creating a search strategy

How does electronic waste recycling affect citizens living in Guiyu, China?

Quick search: All fields ∨ for electronic waste or e-waste

AND ∨ All fields ∨ for recycling or reuse ✕

AND ∨ All fields ∨ for Guiyu or Guangdong ✕ 🔍

Suggested terms: (Wastes) (Recycling) (Electronic Equipment) (Organic Pollutants) (Flame Retardants)

Turn on AutoSuggest | ╋ Add search field | Reset form

Creating a search strategy

Search tip: **truncations!**

recycling = recycling

recycl* = recycle OR recycled OR recyling

Creating a search strategy

Search tip: **quotation marks!**

electronic waste = electronic AND waste

"electronic waste" = phrase search

Creating a search strategy

How does electronic waste recycling affect citizens living in Guiyu, China?

Creating a search strategy

How does electronic waste recycling affect citizens living in Guiyu, China?

I found an article I want in (e.g.) Compendex. How do I get access to the full text?

1. Look for **Full text** or **PDF** button, if one exists.

2. Look for **Find it @ Concordia** button

3. Request a copy through **Interlibrary Loan (COLOMBO)**

4. **Ask a Librarian** if you need help!

183 records found in Compendex for 1884-2020: (((("electronic waste" or e-waste) WN All fields) AND ((recycl* or reuse) WN All fields)) AND ((Guiyu or Guangdong) WN All fields))

Create alert | Save search | RSS feed

Sort by: Relevance

fine <<

meric filter ∨

category   Download all ⌄ ∧

mit to | Exclude

Id a term

cument type ∧
Journal article (171)
Conference article (7)
Article in Press (3)
Book chapter (1)

Bar chart

hor ∧
Xu, Xijin (29)
Huo, Xia (29)
Mai, Bi-Xian (19)
Luo, Xiao-Jun (16)
Fu, Jiamo (13)

View more ›

hor affiliation ∧
State Key Laboratory Of (24)
Organic Geochemistry,
Guangzhou Institute Of
Geochemistry, Chinese
Academy Of Sciences

Display: 25 ⌄ results p

1. ☐ **Policy on E-waste in China - Case study of Guiyu town, Guangdong province**
Li, Bin (University of Jiaxing, Jiaxing, Zhejiang, 314001, China); Du, Huanzheng; Bao, Jiqing; Higano, Yoshiro; Li, Yang Source: *Proceedings - International Conference on Computer Distributed Control and Intelligent Environmental Monitoring, CDCIEM 2011, p 2482-2485, 2011, Proceedings - International Conference on Computer Distributed Control and Intelligent Environmental Monitoring, CDCIEM 2011*
Database: Compendex
Document type: Conference article (CA)
Detailed | Show preview ∨ | Cited by in Scopus (2) | Full text ↗ | Findit!@Concordia

2. ☐ **Heavy metal contamination from electronic waste recycling at Guiyu, southeastern China**
Guo, Yan (School of Environmental Science and Public Health, Wenzhou Medical College, Wenzhou 325035, China); Huang, Changjiang; Zhang, Hong; Dong, Qiaoxiang Source: *Journal of Environmental Quality, v 38, n 4, p 1617-1626, July-August 2009*
Database: Compendex
Document type: Journal article (JA)
Detailed | Show preview ∨ | Cited by in Scopus (52) | Full text ↗ | Findit!@Concordia

3. ☐ **E-waste environmental contamination and public health effects in Guiyu, southeast China**
Ban, Hao (Analytic Cytology Laboratory and the Key Immunopathology Laboratory of Guangdong Province, Shantou University Medical College, Guangdong, China); Xu, Xijin; Wu, Kusheng; Sun, Di; Zhang, Jian; Alabi, Okunola Adenrele; Huo, Xia Source: *E-Waste: Management, Types and Challenges, p 109-128, 2012*
Database: Compendex
Document type: Book chapter (CH)
Detailed | Show preview ∨ | Findit!@Concordia ⟸

4. ☐ **Assessment of cadmium exposure for neonates in Guiyu, an electronic waste pollution site of China**
Li, Yan (Analytical Cytology Laboratory, Key Immunopathology Laboratory of Guangdong Province, Shantou University Medical College, Shantou 515041, China); Huo, Xia; Liu, Junxiao; Peng, Lin; Li, Weiqiu; Xu, Xijin Source: *Environmental Monitoring and Assessment, v 177, n 1-4, p 343-351, June 2011*
Database: Compendex
Document type: Journal article (JA)
Detailed | Show preview ∨ | Cited by in Scopus (34) | Full text ↗ | Findit!@Concordia

UNIVERSITÉ Concordia UNIVERSITY **LIBRARY**

E-waste environmental contamination and public health effects in Guiyu, southeast China
Ban, Hao.   *E-Waste: Management, Types and Challenges*   v.   no.   p. 109   Year: 2012

Check the library catalogue:

Search for the item in the library catalogue (by title *E-Waste: Management, Types and Challenges*)

Interlibrary Loan:

Get the publication through another library using Interlibrary Loan (COLOMBO)   COLOMBO login help

More options:

Get the publication from Concordia's collection through Inter-Campus & Article Delivery

Get the publication through another library using Interlibrary Loan

Ask a Librarian

Search the library catalogue

What is "Find it! @ Concordia"?

UNIVERSITÉ Concordia UNIVERSITY LIBRARY

You are looking for:

Heavy metal contamination from electronic waste recycling at Guiyu, southeastern China
Guo, Yan. *Journal of Environmental Quality* v. 38 no. 4 p. 1617 Year: 2009

Click on the link(s) below to get the article:

ProQuest Central

Check the library catalogue:

Search for the Journal in the library catalogue (by ISSN *00472425*)

More options:

Get the publication from Concordia's collection through Inter-Campus & Article Delivery

Get the publication through another library using Interlibrary Loan

Ask a Librarian

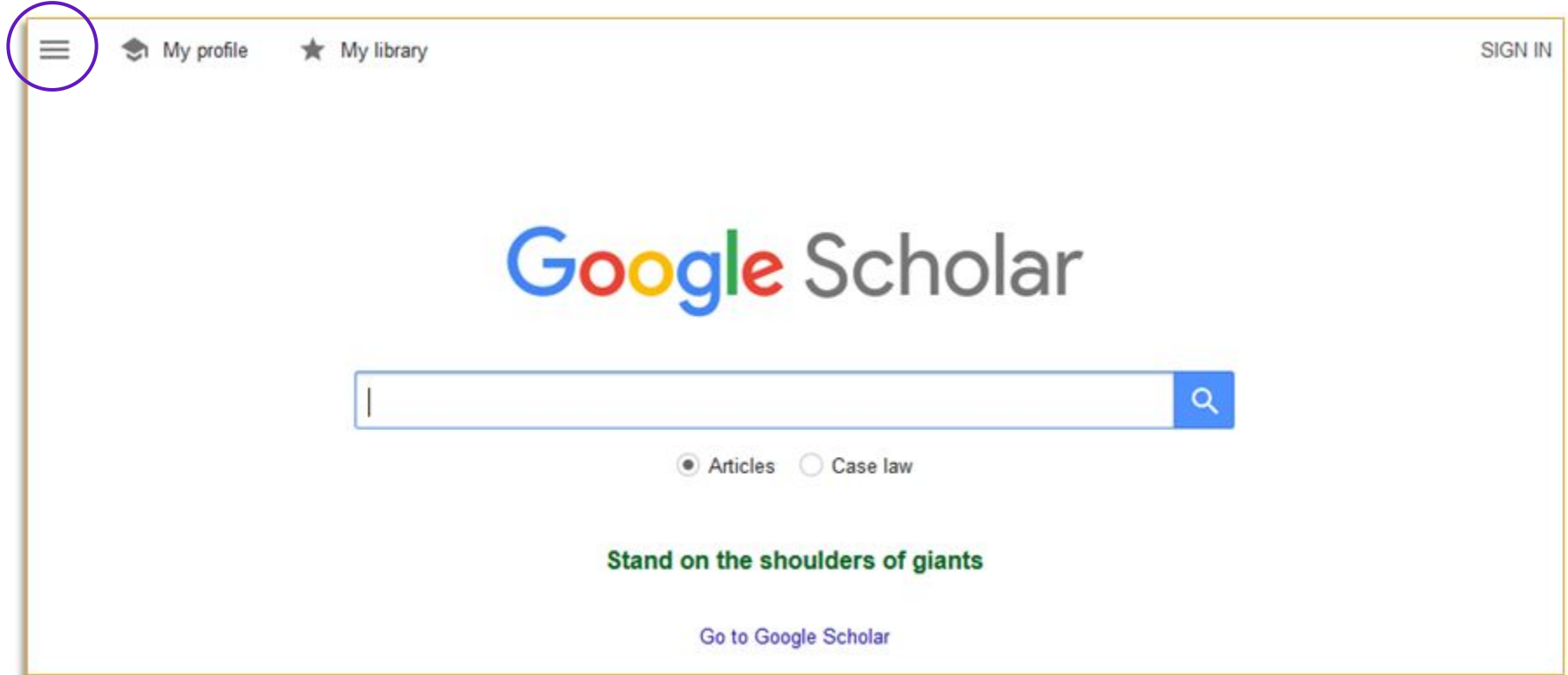Search the library catalogue

What is "Find it! @ Concordia"?

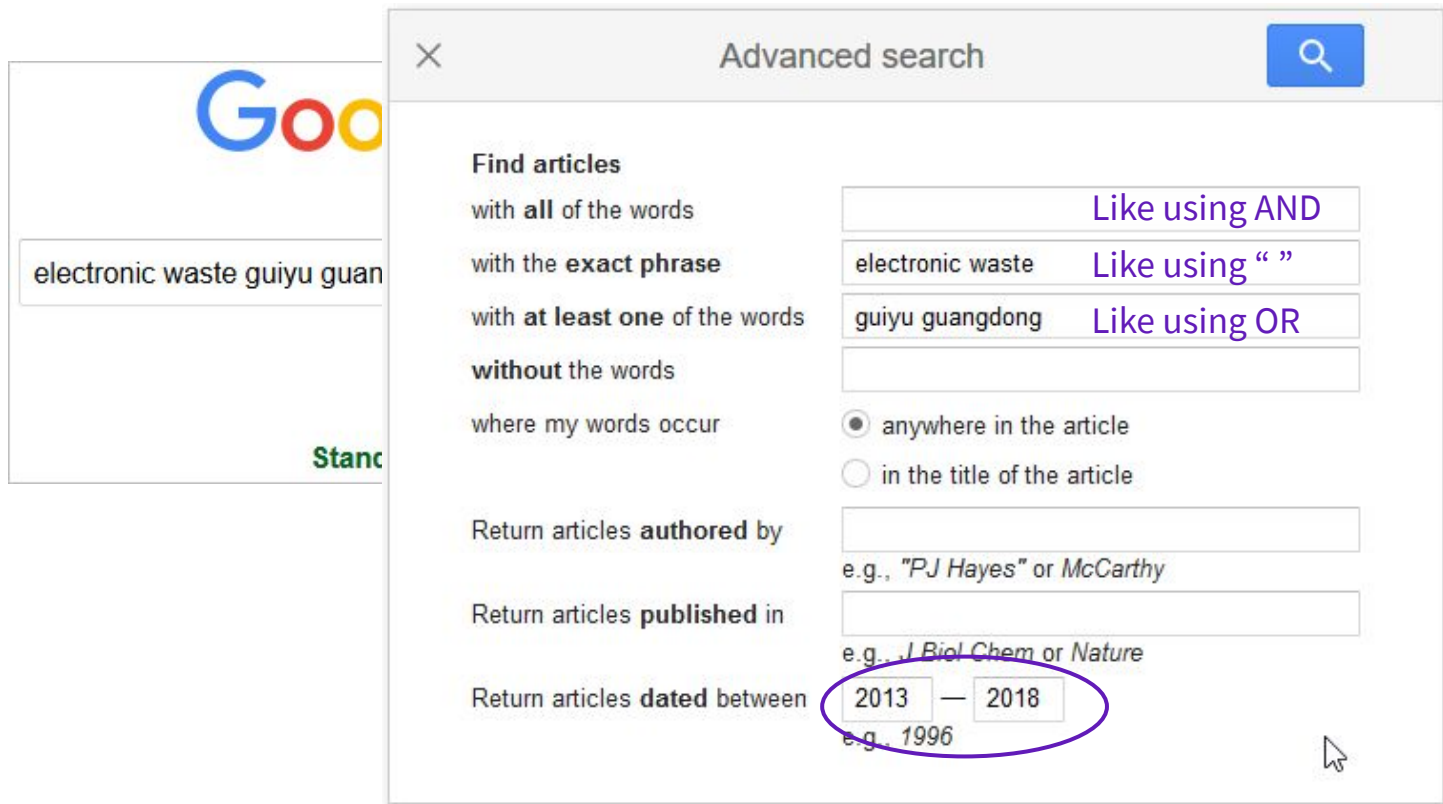# Activity 2: Copying reference information (bibliographic data) to Zotero

http://bit.ly/2W22Zgz

Finding articles in Google Scholar

Google Scholar Tips

Advanced search

Find articles

with **all** of the words — *Like using AND*

with the **exact phrase** — electronic waste — *Like using " "*

with **at least one** of the words — guiyu guangdong — *Like using OR*

without the words

where my words occur — ● anywhere in the article
○ in the title of the article

Return articles **authored** by
e.g., "PJ Hayes" or McCarthy

Return articles **published** in
e.g., J Biol Chem or Nature

Return articles **dated** between — 2013 — 2018
e.g., 1996
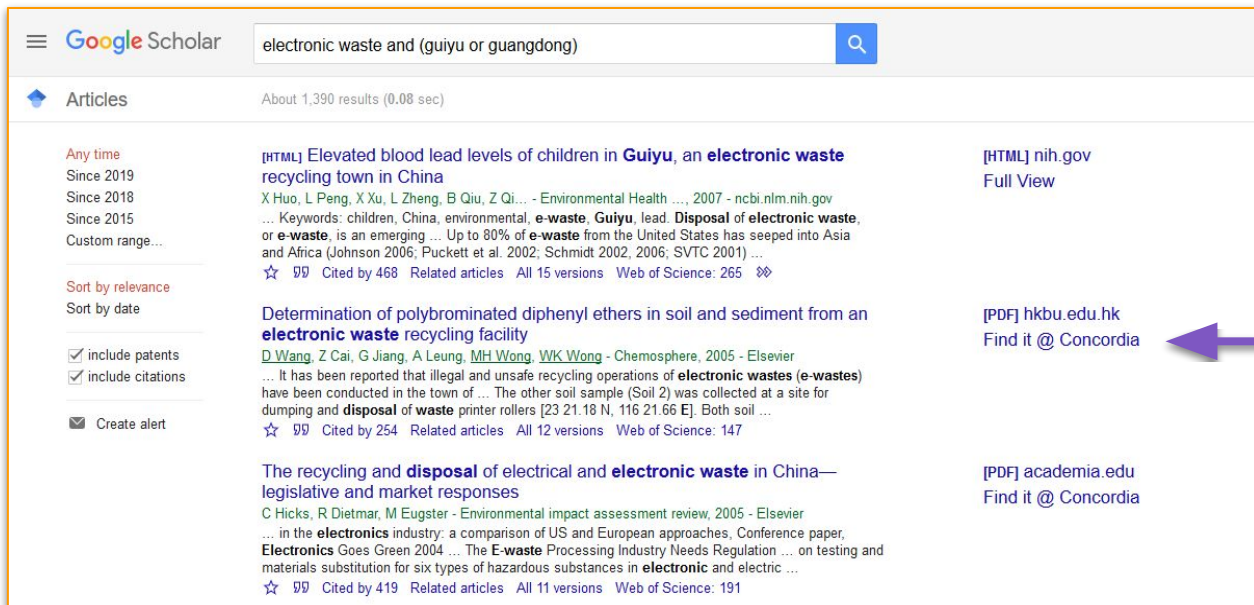
electronic waste guiyu guan

Google Scholar Tips

Set up "Library Links" to add Find it! @ Concordia button to Google Scholar results: https://library.concordia.ca/find/google-scholar.php

Activity 3: Export references from Google Scholar to Zotero

You can do it!

Finding and using other resources

Books and ebooks

Library catalog: https://clues.concordia.ca/

Or try **Discovery Search** on library website

Approach searching the same way as for databases:
1) Break question into research topics
2) Brainstorm search terms and synonyms
3) Combine search terms and synonyms using AND and OR operators

Patents

- [Google Patents](#)
- [Canadian Patent Database](#)
- [US Patent and Trademark Office](#)

Citing sources

Citing: General information

See ENCS Subject Guide for information on citing and **IEEE citation style**

What do you need to cite?

- Any text you quote from another document, website, book, etc.
- Paraphrasing someone's words or ideas
- Images, graphs, etc.

It is always better to err on the side of caution and to **cite the source of any information** you use in your writing.

Citing images in IEEE Style

Caption under image:

"Fig. #: Descriptive title"

Citation: List citation number and cite according to the format of the source where you found the image.

E.g., Image from book: [2]   M. C. Cheng and R. Wirtz , *Mechanical Vibration and Analysi*s, 2nd ed. Upper Saddle River, NJ: Pearson Prentice Hall, 2015, p. 17.
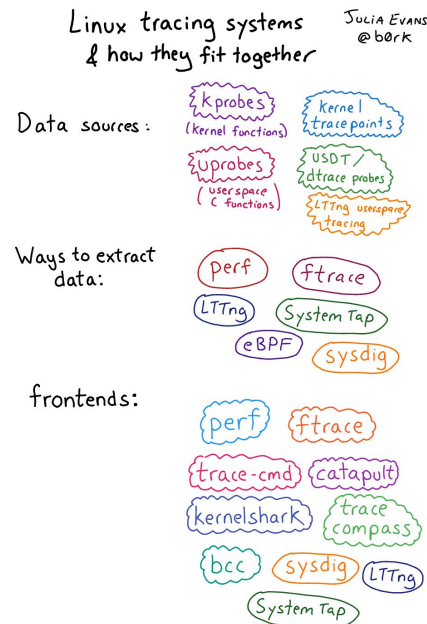
Fig. 1: Linux tracing systems

[1] J. Evans, "Linux tracing systems & how they fit together," *Julia Evans*. Updated July 05, 2017. [Blog]. Available: https://jvns.ca/blog/2017/07/05/linux-tracing-systems, Accessed on: Dec. 19, 2017.

Citing software in IEEE Style

Software

Model for a software application

[1] A. L. Programmer or Organization Name. *The software package*. (Year) [Medium]. Place: Publisher. Available: site/path/file, Accessed on: Month. Day, Year.

A techique used in some IEEE publications simplifies the reference as follows:

[1] "Software Application Name", Year.

Examples

Software developed by an organization (downloaded)

[1] *Apache HTTP Server*. The Apache Software Foundation, 2017 [Online]. Available: https://httpd.apache.org/download.cgi#apache24

[1] "Apache HTTP Server", 2017.

Software developed by a company (from a physical medium)

[1] *MATLAB*. Natick, MA: The MathWorks, Inc., 2002 [DVD-ROM].

Citing: Creating a bibliography

zotero

- Keeps track of your sources

- Creates your bibliographies *for you* in IEEE (or Chicago, etc.) style

- Easily insert citations while you're writing

Zotero

File   Edit   Tools   Help

All Fields & Tag

My Library
ENCS 6721

New Subcollection...
Rename Collection...
Delete Collection...
Delete Collection and Items...
Export Collection...
Create Bibliography from Collection...
Generate Report from Collection...

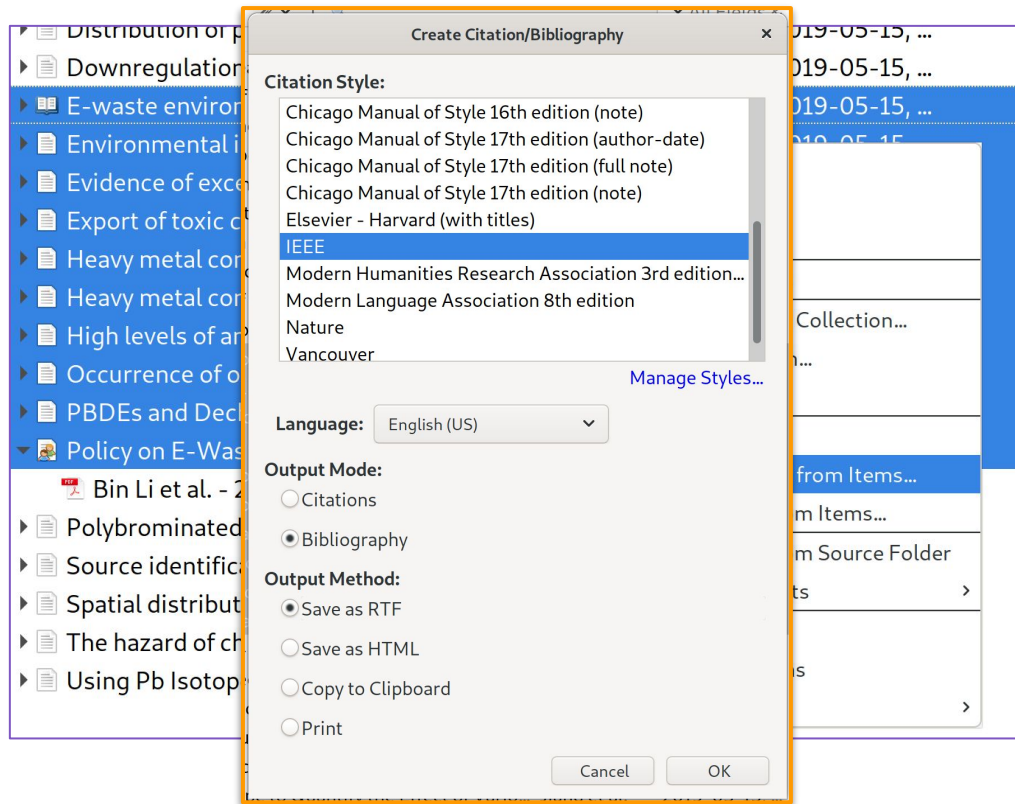| Title	Creator	Date Modifi...
Ambient air heavy metals in PM2.5 and potential human ...	Zheng et al.	2019-05-15, 10...
Assessment of cadmium exposure for neonates in Guiyu...	Li et al.	2019-05-15, 10...
Brominated and organophosphate flame retardants alon...	Li et al.	2019-05-15, 10...
Carcinogenic polycyclic aromatic hydrocarbons in umbili...	Guo et al.	2019-05-15, 10...
Children with health impairments by heavy metals in an ...	Zeng et al.	2019-05-15, 10...
waste disposal practices in de...	Jian et al.	2019-05-15, 10...
ne flame retardants in soil and...	Tao et al.	2019-05-15, 10...
residents at two major electr...	Chan et al.	2019-05-15, 10...
romatic hydrocarbons in soils ...	Yu et al.	2019-05-15, 10...
al S100P is associated with ca...	Zhang et al.	2019-05-15, 10...
ntamination and public health ...	Ban et al.	2019-05-15, 10...
human exposure to PCBs in G...	Xing et al.	2019-05-15, 10...
Evidence of excessive releases of metals from primitive ...	Wong et al.	2019-05-15, 10...
Spatial distribution of polybrominated diphenyl ethers a...	Leung et al.	2019-05-15, 10...
The hazard of chromium exposure to neonates in Guiyu ...	Li et al.	2019-05-15, 10...
Using Pb Isotope to Quantify the Effect of Various Sourc...	Jiang et al.	2019-05-15, 10...

kim   readme   workshop_use
Absorption spectroscopy   Additives
annobib   Antimony   Aromatization
Arsenic

Document1 - Word

File   Home   Insert   Design   Layout   References   Mailings   Review   View   Zotero   ACROBAT

Add/Edit Citation
Add/Edit Bibliography
Document Preferences
Refresh
Unlink Citations

Zotero

Activity 4: Use Zotero to create a bibliography
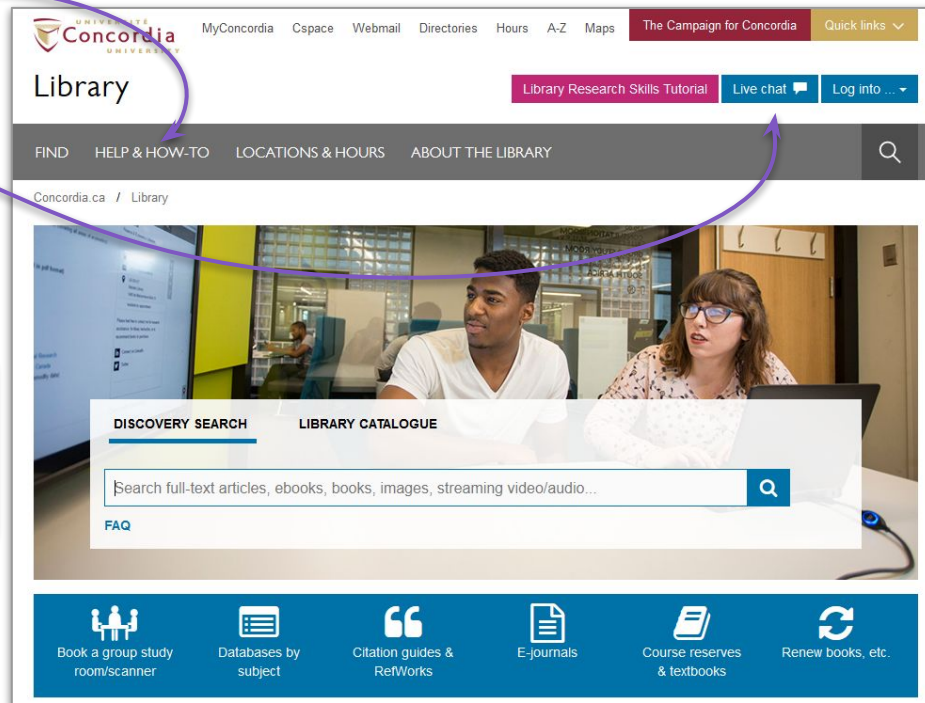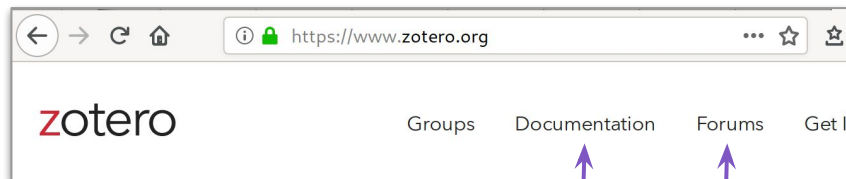
http://bit.ly/2JGkyw5

Getting help

- In person at the Ask Us! desk (Webster) or Reference desk (Vanier)
- Subject guide
- Online chat

Zotero

E-mail us: lib-citation@concordia.ca

Questions?

Created by Takao Umehara
from Noun Project

Want to download these slides?
Go to the **Engineering & CS subject guide**