

## List of topics covered 3.093

Scientific communication

- how it began

Structure of scientific communication

Publication cycle

Publication cycle w/ scientific research

Invisible college

Scientific Paper

What is a primary source

Difference between scholarly journals and popular magazines

The process a scientific paper goes through

- peer review
- plagiarism or fraud in research/publication

What is an index

What is an abstract

What is a database

What is Barton

What is Vera

Using Barton

Using Vera

MIT Libraries home page

Compendex/Inspec

SciFinder Scholar

Web of Science – what makes this database different

Differences between article databases and Google

Chem Abs registry number

What is a review article

SFX and what it does

Alerting services – what they are, what they do

RefWorks or other bibliographic management software

Secondary Sources – what are they and some examples

- what are they good for

Inverted pyramid concept – broad to narrow when doing research

Preprints

Technical reports

Conference papers

Patents

Standards

Google

Google Scholar

Parts of a citation

How to get help citing properly  
Why it's important to cite properly  
Locations of Libraries at MIT  
What subjects each library at MIT covers  
How to get help with library research  
Subject librarians  
Evaluating information  
Checking more than one source to corroborate information

Database Search Tips:

- limit to review articles
- Browse for terms, authors to get correct spellings and variations
- Use Thesaurus to search
- Truncation
- Boolean operators
  - o And
  - o Or
  - o not
- Searching by subject terms
- Identifying keywords for your topic
- Searching by different fields if you know that information (author, title, journal)
- Limiting by publication type, year, etc