

Undergraduate Report:

Undergraduate students need to write a report about the contemporary issues in any energy science related areas and discuss a recognition of the need of the chemical engineering with a solutions including methodologies. The ability of the students will be evaluated to address the issues using the sources of internet and professional references such as journals, books, and handbooks.

Technical Goals:

Read a selected paper
Read other papers or texts in order to understand your assigned paper.
Discuss the contemporary issues and write a report in the required format using search tools.

Potential Topics for Paper:

Solar cell
Solar fuels
Water splitting
Battery
Fuel cell
Environmental remediation
Bio Fuel
Wind
Hydraulic fracturing
Unconventional Fuels
Shale gas/ Shale oil

Organization and Length:

Length: 6 pages, double spaced

References: Use at least ten references which are recent journal articles

Organization: Introduction, Discussion, Conclusion

Writing Guidelines:

- Be sure each paragraph has a topic sentence and all sentences in the paragraph relate to one another or to the topic sentence logically.
- Be sure topic sentences are related logically. Read the first sentence of every paragraph - does the organization make sense?
- First six words of each sentence (ignoring short introductory phrases) should include: a short specific subject a verb expressing a key action old information that sets a context for the rest of the sentence
- Be precise and concise. Do not use first person, contractions, or jargon.
- Make sure you include only relevant information! Do not include parenthetical information - if it's important work it in; if not, omit!

References and Plagiarism:

Do not plagiarize! You will receive a zero on the assignment and egregious plagiarism will result in failure. There are three types of plagiarism: 1) blatant copying of another's writing – this ranges from the copying of a whole article to the copying of a sentence or part, thereof; 2) use of another's work by rearrangement of words in sentences or of sentences in paragraphs; 3) use of an idea without proper citation. Take notes in your own words and write in your own words and use proper citations – that is the only way to be sure to not plagiarize.

Ideas or information which you obtain from your sources and which is not general information must be referenced in the text of your paper using either a superscript number or a number in brackets. Place the references at the end of your paper. The endnotes should include: author name(s), paper title in quotes, journal title, volume, page numbers and year; e.g.:

John Smith, "Epoxy Chemistry", Journal of Thermosets, **65**, 201 (1997).

For books, also include the book title, editor (if any), and publisher name and place; e.g.:

John Smith, "Epoxy Chemistry", in "Chemistry of Thermosets", R. Cox, Ed., pp. 1 - 29, SPE Publishers, New York (1994).

Tools:

web of science

pubs.acs.org

<http://onlinelibrary.wiley.com/>

<http://pubs.rsc.org/>

scifinder.com

<http://www.sciencedirect.com/>