UROP Notice

Project on the History of the Petroleum Refining Industry

Seeking two to three MIT Course 10/chemical engineering (or the functional equivalent) majors to conduct research on the history of the petroleum refining industry, emphasizing the following three topics:

1. The rise of the petrochemical industry during and after World War II, including the work of Warren K. Lewis, MIT professor of chemical engineering and class of 1905, who invented a revolutionary fluid catalytic cracking process first commercialized by Esso during World War II that made available to the Allies large volumes of high-octane aviation gasoline to fight the German Luftwaffe.
2. The role of the University of Tulsa as a center for study of petroleum refining, including the work of Professor W.L. Nelson, author of the textbook *Petroleum Refinery Engineering* (first published in 1936), co-founder of the *Oil and Gas Journal*, and author of the *Journal*’s “Q&A on Technology” column
3. The history of Universal Oil Products (UOP) and its role in the development of petroleum refining technologies from the 1930s to the 1970s (including catalytic polymerization and catalytic cracking).

Tasks include:

1. Researching articles and books on the above topics and incorporating the references and notes into a Zotero database (no prior knowledge of Zotero required, it is an easy-to-learn reference management program).
2. Writing of brief (5-10 page) memoranda on each of the above topics, summarizing key findings in language that a layperson can understand.
3. Regular (every two weeks) meetings with the UROP supervisor to report on research progress.

Participation Options:

1. UROP Direct Funding (depends on approval from the UROP office)
2. Credit