

## Literature Review - Topic Proposal

Due: September 25, 2012

On Campus: Submit hardcopy

Distance Learning and On Campus: Canvas



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Topic (1 or 2 sentences explaining with focus your proposed topic):

“Low temperature combustion (LTC) - in diesel engines”. This work would study the benefits of LTC and different strategies employed in achieving LTC. Focus will also be directed towards reviewing the latest developments in this research field.

Reason for selection of topic (how it relates to your degree and/or research goals):

Low temperature combustion, as the researchers at Sandia National Labs claim, is the comprehensive solution to increase efficiency and reduce emissions. This topic allows me to research upon a new technology in the field of IC-Engines which is generating a lot of interest in engine/auto manufacturers. This would also be a perfect addition to the Hybrid Electric Vehicle knowledge I gained over the past two semesters as entire world is talking about higher efficiency and lower emissions

Explain why this is a topical area of interest:

Research investigations made by combustion engineers and the amount of interest generated around low temperature combustion is truly amazing. This is a fairly new area of research in IC Engines so it is not complicated to understand this field comprehensively and I believe this can be done over a period of time stipulated for literature review. Also, this topic allows me to gain insight into different control strategies employed in order to achieve LTC which I think will be a good learning experience, especially at a time when EPA standards are becoming stringent by the year with fuel costs eternally raising.