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AMERICAN SOCIETY OF MECHANICAL ENGINEERS
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ASME
SETTING THE STANDARD

Taking on the World

Thousands of engineering students from Singapore, Lebanon, Colombia, Sri Lanka, the U.K. and all of the U.S. gathered at the Walt Disney World Swan and Dolphin Hotel in mid November.

Among them was Bryan Lewis, BYU-Idaho's ASME student president. Lewis had been selected as a finalist in the Old Gaurd Oral Presentation Competition for his presentation on research he did working on rocket-nozzle degradation for the Inter-Continental Ballistic Missile Program (ICBM).

"I did not place in the top four, but I was grateful or the opportunity," said Lewis. "It was a great opportunity to refine my presentation skills and think on my feet as people asked questions about my project."

Besides getting to enjoy the warmer weather as well as presentations on things like an autonomous race car built by a student from the U.K., Lewis was also impressed by the unveiling of the new Lamborhini Murciélago, presented by none other than Maurizio Reggiani, V.P. of R&D and Chief Technical Officer of Lamborghini.

Brett Stone
Editor

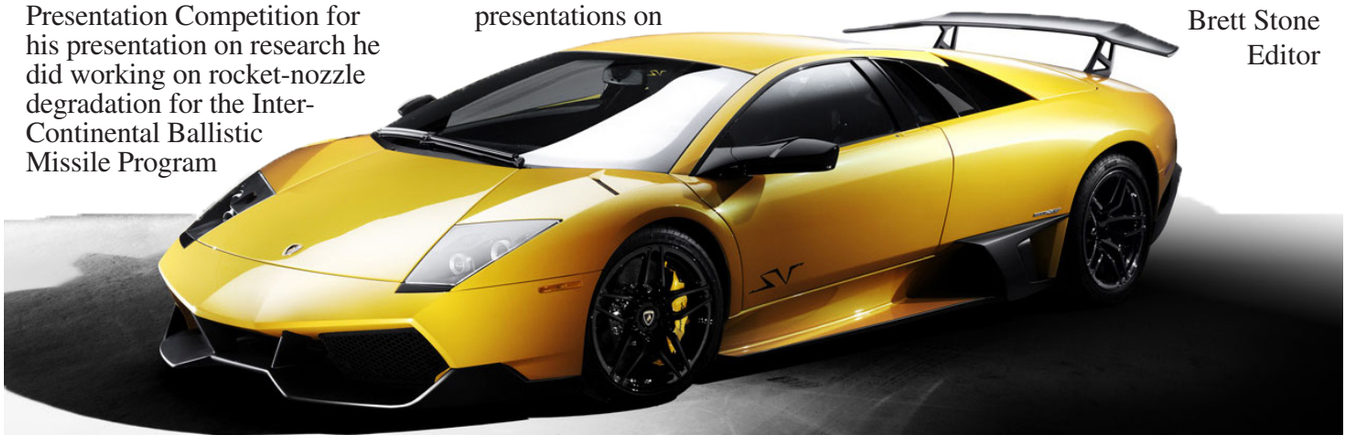


photo courtesy *www.carsuk.net*

Capstone Projects on Display

Mechanical Engineering students met on Dec. 15 to showcase the projects they have been working on throughout the semester. The open house was held in the northeast lobby of the Mark Austin Technical and Engineering Building.

The Mechatronics had five projects at the event. An animated moving wall and a haunted train were sponsored by the Haunted Mill in Teton, Idaho. An automatic ball launcher for pets, a method of controlling devices remotely via the internet, and an indicator to help park cars in garages are sponsored by the Mechanical Engineering department, said Alan Dean, a Mechanical Engineering professor.

Brother Cooley, a Mechanical Engineering professor, sponsored a group of students in a senior capstone course. Students learned about the four processes of energy conversion using a generator hooked up to a water tank.

"[This project] helps them to understand the efficiency of different conversion processes," Cooley said.

The design will be put into use for two thermodynamics courses next semester.

Christina Matekel
Scroll

Russell Daines addresses ASME

Professor challenges students to help tackle energy issues

Russell Daines addressed the BYU-Idaho ASME in a forum on energy issues and possible solutions on Thursday, November 19th.

In his presentation, Daines explained both the reason that so much attention is being given to alternative sources of energy, as well as the different stages of development of several different technologies.

A special emphasis was given to why engineering majors should pay special attention to these issues.

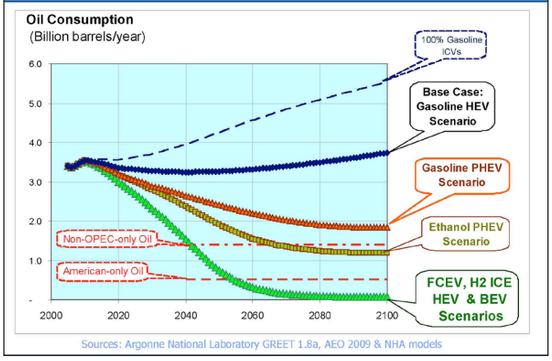
Daines said that developing alternative energy sources would help the U.S. to:

- "avoid the uncertainty and price fluctuations we have seen in the fossil fuel market"
- "address the concerns some have about anthropogenic climate change
- "enhance national security by enhancing our energy independence and insulating us from potential conflicts that may arise from scarcity of some forms of energy
- potentially create a new high-tech job sector and revitalize the economy

The forum overviewed technological advances in such fields as biofuels, solar, geothermal, ocean and wind energy.

"Whether we agree with the idea that peopl are influencig the climate or not, societies have decided that this is an issue they will address," said Daines. "Engineers will be at the forefront of solving energy related problems."

Oil Consumption/Reductions for Options



Sources: Argonne National Laboratory GREET 1.8a, AEO 2009 & NHA models

Acronyms:
ICV- Internal Combustion Vehicle **HEV-** Hybrid Electric Vehicle **PHEV-** Plug-in HEV
FCEV- Fuel Cell EV **H2 ICE-** Hydrogen Internal Combustion Engine **BEV-** Biofuel EV

To submit an idea for the Newsletter, a Cartoon of the Month, or a YouTube clip of the month, please email Brett Stone at *sto05020@byui.edu*