



CRC Program Overview

Timothy C. Belian
Brent K. Bailey
Coordinating Research Council, Inc.

Session V - Open Forum
U.S. DOE/NREL Workshop on
"Exploring Low Emission Diesel Engine Oils"

Holiday Inn Sunspree Resort
Scottsdale, Arizona

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Overview

- Established in 1942 with two members - American Petroleum Institute & Society of Automotive Engineers
- Serves as the focal point for collaborative efforts between the fuels, lubricants and domestic equipment industries. Direct efforts towards generating statistically valid data on interactions of fuels, lubricants and vehicle systems on vehicle and automotive equipment performance, emissions and resultant air quality. Information will be publicly available and will be used:
 - by industry to ensure optimum compatibility and customer satisfaction
 - by industry, Government and the public to enhance joint achievement of clean air and other applicable goals.

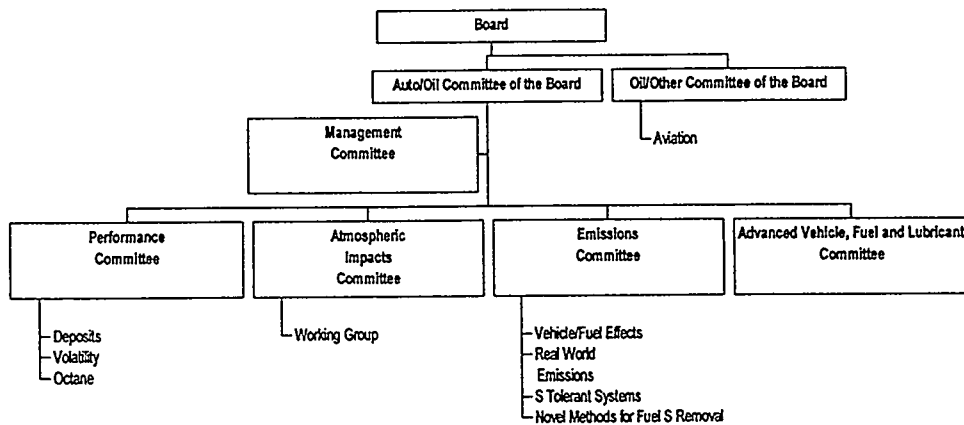


Overview - (Continued)

- Provides a means of cooperation with the Government
- Research carried out by committees
 - cooperative studies among participating laboratories
 - contract studies directed by small group of experts



CRC Organization





CRC Board of Directors

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Performance Committee Role

- Relate physical and chemical properties of automotive fuels and lubricants to vehicles and vehicle component performance as it affects customer satisfaction. Performance shall refer to, but not be limited to, driveability, acceleration, knock, fuel economy, and durability.
- Develop laboratory engine and vehicle test procedures, including methods of quantifying results, to measure effects of fuel and lubricant properties on vehicle and vehicle component performance. Tests will be used in commerce to provide customer satisfaction and/or to assure compliance with regulatory requirements.



Examples of Current Performance Committee Research

CCD Test Development

- 1999 Hot Fuel Handling Program to determine critical volatility parameters for predicting hot fuel handling performance in fuel injection vehicles
- 1999 Octane Workshop to measure octane number requirement of knock sensor equipped vehicles



Emissions Committee Role

- Define effects that changes in automotive hardware, fuel composition, and their interactions have on automotive emissions related to air quality and air-borne toxic issues.
- Determine vehicle/fuel source emissions contribution to the environment and how current computer models reflect these contributions.
- Address current and anticipated regulatory concerns.



Examples of Current Emissions Committee Research

- E-43 - Diesel Particulate Sampling Methodology
- E-37 - Effect of A/C on Tailpipe Emissions
- E-23 - Remote Sensing of High Emitters
- E-47 - Sulfur/LEV Reversibility Program



Advanced Vehicle, Fuel, and Lubricants Committee Role

- Define effects that changes in advanced automotive hardware, new fuel formulations, and their interactions have on automotive emissions.
- Evaluate the durability and operability of new fuel formulations in advanced hardware.



Examples of Current Advanced Vehicle, Fuel, and Lubricants Committee Research

- AVFL-2 - Operability and Compatibility Characteristics of Advanced Technology Diesel Fuels
- AVFL-5 - Evaluation of NO_x Aftertreatment Technologies for GDI Engines



Atmospheric Impacts Role

- Improve the ability to predict the impact of emissions on air quality and airborne toxics by promoting and participating in leveraged programs to improve emissions inventories, reducing uncertainties in the atmospheric chemistry of emissions, and comparing performance of air quality models.
- Predict the atmospheric impact of emerging data.
- Address current and anticipated regulatory concerns.



Examples of Current Atmospheric Impacts Committee Research

- A-23 - Biogenic Emissions Contribution to Urban Ozone and PM2.5
- A-28 - Meteorological Models for Inter-Regional Transport
- A-36 - Weekday vs. Weekend Emissions



CRC Web Site

www.crao.com