The objective of this study was to investigate the emissions from a diesel engine running on iso-propyl esters made from soybean oil and yellow grease. The emissions from the combustion of iso-propyl esters were compared to methyl esters from the same source material (No. 2 diesel fuel), which was the baseline fuel for this study. The emissions from the diesel engine running on biodiesel were strongly affected by the source material of soybean oil or yellow grease. While the iso-propyl esters have better flow properties when compared to methyl esters, the carbon emissions were quite similar for the two different esters from the same source material.

Biodiesel and Their Use in Boilers. C. Krishna and T. Buscher, Brookhaven National Laboratory, United States. Contact: C. Krishna, Brookhaven National Laboratory, Upton 226, Upton, New York 11973, United States. Abstract: Biodiesel, a renewable diesel-like fuel, is being considered as an alternative to petroleum diesel. The primary benefit of biodiesel is its lower sulfur content, which reduces the production of SOx (sulfur oxides) and NOx emissions. This is particularly important in areas with high levels of vehicle emissions. Biodiesel also has a lower carbon footprint compared to petroleum diesel.

Biofuels and Their Use in Boilers. C. Krishna and T. Buscher, Brookhaven National Laboratory, United States. Contact: C. Krishna, Brookhaven National Laboratory, Upton 226, Upton, New York 11973, United States. Abstract: Biodiesel, a renewable diesel-like fuel, is being considered as an alternative to petroleum diesel. The primary benefit of biodiesel is its lower sulfur content, which reduces the production of SOx (sulfur oxides) and NOx emissions. This is particularly important in areas with high levels of vehicle emissions. Biodiesel also has a lower carbon footprint compared to petroleum diesel.

Tuesday Afternoon

IOP 3: Alternative Crops: Cuphea 2004 CommercializationChair: B. McCormick, Prachar & Gamble, USA; and S. Kushi, Oregon State University, USA.

Herbicides and Desiccants for Managing Cuphea, a New Oleoid Crop. F. Fournier, G. Conner, C. Rakov, J. Soto, G. Green, M. Vanden, M. Reynolds, J. Wismer, R. Smith, C. Plage, R. James, R. Johnson, J. Kupke, M. Johnson, M. Johnson, and L. Johnson. Contact: Frank Porcella USDA, ARS, NCSRL, 800 Iowa Ave., Morrilton, Arkansas 72110, United States. Abstract: Cuphea, a new oleoid crop, has been developed for sustainable agriculture. Cuphea can be cultivated in a wide range of environments and can be grown as a bioenergy source or as a source of valuable oils.

Combustion and Emissions from a Diesel Engine Fueled with Iso-Propyl Esters. J. Van Ganse and P. Wang. Iowa State University, United States. Contact: Jon Van Ganse, Iowa State University, Room 202, Building Engineering Bldg, Ames, IA 50011, United States. Abstract: The objective of this study was to investigate the emissions from a diesel engine running on iso-propyl esters made from soybean oil and yellow grease. The emissions from the combustion of iso-propyl esters were compared to methyl esters from the same source material (No. 2 diesel fuel), which was the baseline fuel for this study. The emissions from the diesel engine running on biodiesel were strongly affected by the source material of soybean oil or yellow grease. While the iso-propyl esters have better flow properties when compared to methyl esters, the carbon emissions were quite similar for the two different esters from the same source material.

Biofuels and Their Use in Boilers. C. Krishna and T. Buscher, Brookhaven National Laboratory, United States. Contact: C. Krishna, Brookhaven National Laboratory, Upton 226, Upton, New York 11973, United States. Abstract: Biodiesel, a renewable diesel-like fuel, is being considered as an alternative to petroleum diesel. The primary benefit of biodiesel is its lower sulfur content, which reduces the production of SOx (sulfur oxides) and NOx emissions. This is particularly important in areas with high levels of vehicle emissions. Biodiesel also has a lower carbon footprint compared to petroleum diesel.

Tuesday Afternoon

IOP 3: Alternative Crops: Cuphea 2004 CommercializationChair: B. McCormick, Prachar & Gamble, USA; and S. Kushi, Oregon State University, USA.

Herbicides and Desiccants for Managing Cuphea, a New Oleoid Crop. F. Fournier, G. Conner, C. Rakov, J. Soto, G. Green, M. Vanden, M. Reynolds, J. Wismer, R. Smith, C. Plage, R. James, R. Johnson, J. Kupke, M. Johnson, and L. Johnson. Contact: Frank Porcella USDA, ARS, NCSRL, 800 Iowa Ave., Morrilton, Arkansas 72110, United States. Abstract: Cuphea, a new oleoid crop, has been developed for sustainable agriculture. Cuphea can be cultivated in a wide range of environments and can be grown as a bioenergy source or as a source of valuable oils.

Combustion and Emissions from a Diesel Engine Fueled with Iso-Propyl Esters. J. Van Ganse and P. Wang. Iowa State University, United States. Contact: Jon Van Ganse, Iowa State University, Room 202, Building Engineering Bldg, Ames, IA 50011, United States. Abstract: The objective of this study was to investigate the emissions from a diesel engine running on iso-propyl esters made from soybean oil and yellow grease. The emissions from the combustion of iso-propyl esters were compared to methyl esters from the same source material (No. 2 diesel fuel), which was the baseline fuel for this study. The emissions from the diesel engine running on biodiesel were strongly affected by the source material of soybean oil or yellow grease. While the iso-propyl esters have better flow properties when compared to methyl esters, the carbon emissions were quite similar for the two different esters from the same source material.

Biofuels and Their Use in Boilers. C. Krishna and T. Buscher, Brookhaven National Laboratory, United States. Contact: C. Krishna, Brookhaven National Laboratory, Upton 226, Upton, New York 11973, United States. Abstract: Biodiesel, a renewable diesel-like fuel, is being considered as an alternative to petroleum diesel. The primary benefit of biodiesel is its lower sulfur content, which reduces the production of SOx (sulfur oxides) and NOx emissions. This is particularly important in areas with high levels of vehicle emissions. Biodiesel also has a lower carbon footprint compared to petroleum diesel.