

# **Solar Energy International Biodiesel Workshop**



## **Introduction to the Diesel Engine**

# Diesel Vocabulary

- Aftercooling / Intercooling
- Turbocharging
- Cetane Number
- Cloud Point (CP)
- Flash Point
- Cold Filter Plugging Point (CFPP)
- Pour Point
- Compression Ignition (CI)
- Direct Injection (DI)
- In-Direct Injection (IDI)
- In-Line Injection Pump
- Nitrogen Oxides (NO<sub>x</sub>)
- Pump-Line-Nozzle Fuel System
- Rotary Injection Pump
- Unit Injector
- Common Rail Injection

# What is a Diesel Engine?

- **Rudolf Diesel** developed the idea for the diesel engine and obtained the German patent for it in 1892.
- His goal was to create an engine with **high efficiency**.
- Gasoline engines had been invented in 1876 and, especially at that time, were not very efficient
- Both the gasoline and diesel engine utilize the process of internal combustion for power

