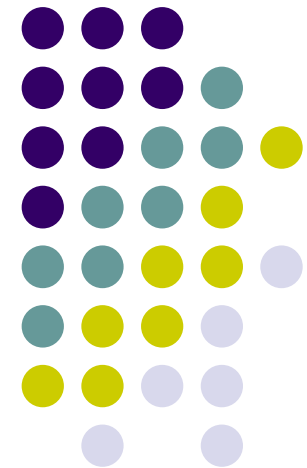


Emission Factor Database Session

Dr. Mahfudz Al Huda, M.Eng



Overview of Vehicle Emission Measurement

(Akiyoshi ITO, JARI)



- Automotive emission is one of the major factors for air pollution, esp. in urban area.
- The accuracy and precision of the emission measurement methods are very important.
- The real automotive emissions can be estimate by the combination of emission factor and other statistical data.
- JARI proposed the ChDy emission measurement training program.

Overview of NGV in China & Research Status of CAERI

(Zou Bowen, CAERI)



- Automotive emission become a main factor on air pollution issue, esp. in urban area.
- The usage of NGV as alternative fuel for automotive engine has a potential prospect to reduce negative effects of automotive emissions.
- CAERI has been developing the technology for the application of NGV as fuel of automotive engines.

Emission Factors for Indian In Use Vehicles

(Amita Baikerikar, ARAI)



- It is important to develop Emission Factors for different category of vehicles to reflect the variance in fuel quality, vehicle technology & age, maintenance practices, tailpipe treatment, etc. by conducting exhaust mass emission tests.

Energy and Environment in Thailand

(Utai Unagul, TAI)



- TAI has sufficient facilities for testing automotive emissions.
- TAI has several experiences of studying fuel consumption issues and the emission of CO₂.

Discussion



- How to establish the driving cycle data that close to the real driving behavior in the road?
- How far the emission factors can be reduced with the usage of NGV engines compared with Gasoline/Diesel engines?
- Is there any standardization of the methods/procedures to measure automotive emissions?
- Is the proposed JARI training program meet with the needs of the participants?
- How about the methods/procedures to measure the emission of gas engine vehicle, HEV, and EV?
- Etc.

Summary



- The accuracy and precision of the emission measurement methods are very important.
- The real automotive emissions can be estimate by the combination of emission factor and other statistical data.
- The usage of NGV as alternative fuel for automotive engine has a potential prospect to reduce negative effects of automotive emissions.
- It is important to develop Emission Factors for different category of vehicles to reflect the variance in fuel quality, vehicle technology & age, etc.

Suggestions for #3 AAI Summit



- Continue this emission factors measurement issues as the topics of discussion.
- Sharing knowledge and experiences of these issues is very important.
- The methods/procedures for measuring emission factors on non-conventional engine, such as Gas, HEV, and EV; need to become the agenda.
- JARI training need to adjust for variety of needs (level, interests) .
- The needs also depend on external price.
e.g. Oil price



For website

- In the Technical Session of Emission Factor Database, the participants have discussed attractively about the methods/procedures for estimating the emission factors according to driving cycles close to the real driving conditions. And they all agreed to continue these topics for the next (#3) AAI Summit, and extends the discussion to the emission factors of gas vehicles, HEVs, and EVs.