



International Workshop on "Recent Advances in Science and Technology for Exhaust Treatments of Mobile Sources"

(NCRS G-COE Symposium/Workshop Series 2008-VIII)

Organized by

Global COE program of "Novel Carbon Resource Sciences: Coal-Based Eco-Innovations",
13 February, 2009, C-Cube_Room301, Chikushi Campus, Kyushu University

PROGRAM

- 10:00-10:05 Opening Remarks: Prof. Hideo Nagashima (Leader of the G-COE, Kyushu University, Japan)
- 10:05-10:10 Brief Introduction of the Workshop: Prof. Yasutake Teraoka (Kyushu University, Japan)
- 10:10-10:50 Dr. Nitin Labhsetwar (National Environmental Engineering Research Institute, India)
"Non-noble metal based catalysts: Possibilities for their applications in exhaust treatments of mobile sources"
- 10:50-11:30 Prof. Vito Specchia (Politecnico di Torino, Italy)
"Vehicle emissions control via catalytic reaction engineering: State-of-the-art at Politecnico of Turin"
- 11:30-12:00 Prof. Koji Takasaki and Prof. Hiroshi Tajima (Kyushu University, Japan)
"Marine exhaust emission regulation and control"
- <<Lunch Break>>
- 13:20-14:00 Dr. Hideaki Hamada (National Institute of Advanced Industrial Science and Technology, Japan)
"Development of Ir/silica-based catalysts for the selective reduction of NO with CO applied to diesel exhaust"
- 14:00-14:40 Prof. Hong He (Research Center for Eco-Environmental Sciences, CAS, China)
"Selective catalytic reduction of NO_x by ethanol over precipitable silver compound catalysts and the application of AgCl/Al₂O₃ to diesel exhaust treatment"
- 14:40-15:00 <<Coffee Break>>
- 15:00-15:40 Prof. Norio Miura (Kyushu University, Japan)
"Zirconia-based gas sensors aiming at monitoring of automotive exhaust"
- 15:40-16:20 Mr. Hironobu Shimokawa and Prof. Yasutake Teraoka (Kyushu University, Japan)
"Catalyst development and catalysis of diesel particulate removal"
- 16:20-17:00 Prof. Masato Machida (Kumamoto University, Japan)
"Catalytic applications of large-capacity oxygen storage materials"
- 17:00- Closing Remarks



Brief Introduction of the G-COE and the purpose of the Workshop

Kyushu University and Fukuoka Women's University have established a Global Centre of Excellence (G-COE) in Novel Carbon Resource Sciences focusing on Coal-based Eco Innovations. The COE is financially supported by Ministry of Education, Culture, Sports, Science and Technology, Japan. It has started in July 2008 and will run for five years.

The program was developed with the idea to provide an educational and research framework for students interested in developing new technology in the processing and utilization of coal and other carbon-providing resources (natural gas, petroleum, and biomass). Special emphasis is to be given to more environmentally friendly and sustainable processes.

The timeliness of the COE is given by the fact that currently the securing of sufficient energy supplies and environmental protection are the global priority. Today, fossil fuels occupy more than 80% of primary energy supply, and they will remain the dominant source of energy for 30 years or more. Although catalysis has been successfully applied to clean up the exhausts from gasoline automobiles and stationary sources, exhausts from combustion engines are considered to be an important source of environmental pollution. Considering an expected world-wide increase in the number of vehicles, exhaust treatments of mobile sources are one of important issues for environmentally friendly and sustainable usage of fossil fuels.

The purpose of this workshop is to discuss the current status, to point out the current problems, to exchange ideas and to suggest the future direction of development in the field of science and technology for exhaust treatments of mobile sources among leading researchers. Since the G-COE program is an educational program, students and young researchers are welcome to participate in the Workshop and to join actively the discussion.