Session 2 :
Low Environmental Impact Transportation Systems

Chair:

YAMAGUCHI Eiichi, Professor, Doshisha University

Organizer:

NIWA Kunihiro, Senior Fellow, CRDS, JST

Panelist:

1. HAYASHI Koichi, Professor, Aoyama Gakuin University
2. TSUKAMOTO Hisashi, CEO/CTO, Quallion LLC
3. YAMAMOTO Iwao, President, Mitsubishi Chemical Science and Technology Research Center, Inc.
4. MORIKAWA Hiroyuki, Professor, University of Tokyo
5. WATANABE Hiroyuki, Senior Technical Executive, Toyota Motor Co.

Session Objective

We discuss the social and economic issues as well as technological issues to sketch the transportation systems 10 years from now.

In particular, we discuss the design and implementation of *Ba* (Interaction Field among key players).

Brain storming as a case study of Ba

Goal: Realize low environmental impact transportation systems that accounts for the largest proportion of world's CO_2 emissions.

Provocation: What is the car engine, which consumes oil and exhausts CO_2 and polluted gases ? Instead of thinking about Kaizen of the engine, think about paradigm disruptive innovation by "digging into science".

Key technology:

1. Liquid nitrogen (air) thermodynamic system
2. Electric motor system (rechargeable battery etc.)
3. paradigm disruptive ITS (wireless IT)