

EVS-22 Oral Sessions

1A BATTERIES		
Development of Ni-Mh Battery for 2006 Civic Hybrid	Katsuya Inoue	Honda R&D Co., Ltd.
Development of High-Power and Long-Life Ni-Mh Batteries for Hybrid Electric Vehicles	Ikuo Yonezu	SANYO Electric Co., Ltd.
Innovative Lead Acid Battery Development for Electric and Hybrid Vehicle Applications	Laurent Torcheux	Electricite de France (EDF)
High Power and High Energy Lithium Battery for FCVs and HEVs	Takeshi Sasaki	GS Yuasa Corporation
1B ENERGY EFFICIENCY		
Well-To-Wheel Visualization	Joerg Wind	DaimlerChrysler AG
Measuring and Reporting Fuel Economy of Plug-in Hybrid Electric Vehicles	Jeffrey David Gonder	National Renewable Energy Laboratory (NREL)
Statistical Analysis of Fuel Consumption of Hybrid Electric Vehicles in Japan	Yuki Kudoh	National Institute of Advanced Industrial Science and Technology (AIST)
Parametric Design of a Two-Mode Hybrid Powertrain	Namwook Kim	Seoul National University
1C TWO-WHEELERS		
Study of Small-Sized Scooter Hybrid Vehicle	Hiroyuki Kojima	Honda R&D Co., Ltd.
The Pedelec Market in Flanders: The Position of the Bicycle Dealers	Jan Cappelle	KaHo Sint-Lieven
Challenges for Commercialization of Direct Methanol Fuel Cell-Powered Motorbikes	Shuh Adachi	Yamaha Motor Co., Ltd.
Major Activities of Light Electric Scooter Development in Taiwan	Bing Ming Lin	Industrial Technology Research Institute
1D PROPULSION SYSTEMS		
Novel Torque Control Technique for Interior Permanent Magnet Synchronous Motors	Hideo Nakai	Toyota Central R&D Labs., Inc.
The Motor Control Technologies for GS450h Hybrid System	Kenji Yamada	Toyota Motor Corporation
Large Torque and High Efficiency Permanent Magnet Reluctance Motor for a Hybrid Truck	Masanori Arata	Toshiba Corporation
Comparative Analysis of Power Mixing Unit for a Hybrid Electric Vehicle	Jeongmin Kim	Sungkyunkwan University
1E SPECIAL ORAL SESSION:FUEL CELL VEHICLE DEMONSTRATION		
Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project: Fall 2006 Progress Update	Keith Wipke	National Renewable Energy Laboratory (NREL)
Well to Wheel Analysis for Fuel Cell Vehicles in Japanese Conditions	Hisashi Ishitani	Keio University
Data Analysis of Daimlerchrysler's Worldwide Fuel Cell Passenger Car Fleet	Christof Nitsche	DaimlerChrysler AG
GM FC Demonstration Through Partnership	George Hansen	General Motors Asia Pacific Japan Ltd.

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2A BATTERIES		
Current Overview of U.S. Department of Energy Research on Energy Storage for Transportation Systems	Tien Q. Duong	U.S. Department of Energy
Study on Power Fade of Cylindrical Li-ion Cells for FCVs and HEVs	Kuniaki Tatsumi	National Institute of Advanced Industrial Science and Technology (AIST)
Non-Flammable Electrolyte for Li-Batteries for Fuel Cell Vehicles and Hybrid Vehicles	Hikari Sakaebe	National Institute of Advanced Industrial Science and Technology (AIST)
Nanophosphate Technology for HEV Applications	Andy C. Chu	A123Systems
2B FUEL CELL VEHICLES		
Design Tools for Fuel Cell Drive Trains Applied to the "Wireless Trolley" City Bus	Bram Veenhuizen	HAN University
Fuel Cell Hybrid Midibuses for Niche Applications	Naoya Kodama	Hydrogenics Corporation
Hybrid Fuel Cell Bus Experience in Turin : "On Road" Experimental Results	ANTONINO GENOVESE	Italian National Research Agency for the Energy and the Environment (ENEA)
Using a Common Methodology for the Assessment of Hydrogen Vehicle Demonstrations	Luc Pelkmans	VITO
2C POWER ELECTRONICS		
Compact and High-Power Inverter for 2006 Model Year Civic Hybrid	Fumio Anraku	Honda R&D Co., Ltd.
Inverter Integrated with Electric Compressor	Takahisa Kaneko	Denso Corporation
50kHz-25kW Bilateral Chopper Circuit SAZZ-1 for HEV	Yoshihiro Ito	Yokohama National University
HEV Power Electronics - Adapting to Automotive Requirements	Mark Nils Muenzer	Infineon Technologies AG
2D PROPULSION SYSTEMS		
Stability of an Electric Vehicle with Permanent-Magnet in-Wheel Motors During Electrical Faults	Mats Lennart Jonasson	KTH, Volvo cars
Improvement of EV Maneuverability and Safety by Disturbance Observer Based Dynamic Force Distribution	Peng He	The University of Tokyo
Loss Minimization Control of EV Motor Drives	Sadegh Vaez-Zadeh	University of Tehran
Optimal Torque Distribution between Regenerative Braking and EHB for a 4WD Hybrid Electric Vehicle Stability Enhancement	Sungho Hwang	Sungkyunkwan University
2E HYBRID ELECTRIC VEHICLES		
Electrical Supercharging Technology in High Efficiency Hybrid System	Naoyuki Yamagata	Mazda Motor Corporation
Development of IMA System for the 2006 Civic Hybrid	Koshiro Fuchibe	Honda R&D Co., Ltd.
Modeling and Simulation of Electro-Mechanical Brake for Hybrid Electric Vehicles	Jeongkeun Ahn	Sungkyunkwan University
Impedance-Based Modeling of Electrochemical Energy Storage Devices - Review and Examples of a Successful Approach for the Design of Hybrid Electric Vehicles	Marc Thele	RWTH Aachen University

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3A BATTERIES		
End of Life Management of HEV Batteries. An Industrial Award-Winning Comprehensive Solution.	Daniel Cheret	Umicore
Transportation Bipolar Ni-MH Battery	Martin Klein	Electro Energy Inc.
EV Battery Development -Analysis of Specification Requirements-	Takuya Miyashita	Mitsubishi Motors Corporation
Battery Thermal Management Design Modeling	Ahmad A Pesaran	National Renewable Energy Laboratory (NREL)
Challenges and Opportunities for Lithium-ion Batteries in Automotive Applications	Menahem Anderman	Advanced Automotive Batteries
3B FUEL CELLS		
Nucellsys' Next Generation Automotive Fuel Cell Systems	Andre Martin	NuCellSys GmbH
A Study on Parameter Matching of Fuel Cell Electric Bus Powertrain	Bingli Zhang	Hefei University of Technology
Development of Mea for Automotive Fuel Cell at Honda.	Kaoru Fukuda	Honda R&D Co., Ltd.
Improved Durability Performance of the Electrode for Pefc Using Ultra-Low Platinum Loading Carbon Powder	Yui Senda	GS Yuasa Corporation
The Hytran Project & Tenneco's Contribution to the Development of Fuel Cell Systems	Marcel Womann	Tenneco
3C BATTERY ELECTRIC VEHICLES		
Developing Monitoring and Maintenance Agreement and Tools for 5 Portuguese Cities with Electric Mini-Buses	Robert Stussi	Portuguese Electric Vehicle Association (APVE)
Which Low Environmental Impact Vehicles for Freight Distribution in Big Cities?	Giovanni Pede	Italian National Research Agency for the Energy and the Environment (ENEA)
Soft-Link Control for Electric Light Vehicle	Manabu Omae	Keio University
Ultracapacitors - The Boost in Alternative Powertrains	Juergen Auer	Maxwell Technologies
Lithium Ion Superpolymer®-High Performance Battery for Lowcost,Ultra-Safe, Long Range (300Km) ZEVs and Plug-in Hybrids	G. DASGUPTA	Electrovaya Corporation
3D PROPULSION SYSTEMS		
Motion Control and Road Condition Estimation for Electric Vehicle	Hiroshi Fujimoto	Yokohama National University
Vehicle Motion Control Issues Using Micro Electric Vehicle "Novel"	Pongsathom Raksincharoensak	Tokyo University of Agriculture and Technology
Normal Force Stabilizing Control Using Small EV Powered Only by Electric Double Layer Capacitor	Kiyotaka Kawashima	The University of Tokyo
A Research of Direct Yaw-Moment Control on Slippery Road for in-Wheel Motor Vehicle	Makoto Kamachi	Mitsubishi Motors Corporation
The World-Wide Status and Application of Ultracapacitors in Vehicles: Cell and Module Performance and Cost and System Considerations	Andrew Francis Burke	University of California, Davis
3E HYBRID ELECTRIC VEHICLES		
Hybrid System Development for GS450h	Kensuke Kamichi	Toyota Motor Corporation
Innovative Approach to Vary Degree of Hybridization for Advanced Powertrain Testing Using a Single Motor	Neeraj Shidore S	Argonne National Laboratory
Components for Hybrid Vehicles: Results of the IEA Annex VII "Hybrid Vehicle" Phase III	Fiorentino Valerio Conte	Arsenal Research
A Comprehensive Database of Hybrid Electric Vehicle Powertrain Architectures and Components for Enhanced Decision Making	Geoffrey Richard Hannis	International Automotive Research Centre
Peak Power Based Fuel Cell Hybrid Propulsion System	Joeri Van Mierlo	Vrije Universiteit Brussel

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4A BATTERIES				
Development of MnLi-ion Battery Package for Small Electric Vehicle of New Concept	Narimatsu Yoshii	Fuji Heavy Industries Ltd.		
Development of High Power Lithium-ion Battery Pack for Hybrid Electric Vehicles	YoonCheol Jeon	Samsung SDI Co., Ltd.		
Research and Development Work on Lithium-ion Batteries for Environmental Vehicles	Osamu Shimamura	Nissan Motor Co., Ltd.		
Comparison of Two Different Types of Battery Cells for Cars - Environmental Impact of NiMH and LiMn2O4 Cells - in Production and Use -	Johannes Gediga	PE Asia Corporation		
4B PLUG-IN HYBRIDS				
Plug-in Vehicle Control Strategy: From Global Optimization to Real-Time Application	Aymeric Pierre Pousseau	Argonne National Laboratory		
Dynamic Programming Applied to Investigate Energy Management Strategies for a Plug-in HEV	Michael Patrick O'Keefe	National Renewable Energy Laboratory (NREL)		
GLOBAL PROSPECTS OF PLUG-IN HYBRIDS	Rob Winkel	TNO		
Charging Infrastructure for Tomorrow's Plug-in Hybrids and Electric Vehicles	Cyriacus Adrianus Bleijs	Electricite de France (EDF)		
4C CAPACITORS				
Approach of Development of Electric Double Layer Capacitor for High Power and Long Life	Ryutaro Nozu	Nisshinbo Industries Incorporated		
Double Layer Capacitor Developments for More Performance at Lower Cost	Michio Okamura	Power Systems Co., Ltd.		
Method of Measuring Ultracapacitor's Performance for HEVs	Minoru Noguchi	Honda R&D Co., Ltd.		
Investigation of Optimal Test Method for Edl Capacitor Evaluation	Masakazu Sasaki	Nissan Diesel Motor Co., Ltd.		
4D PROPULSION & SUBSYSTEMS				
Development of Small Size Power Control Unit	Ryouji Hironaka	Toyota Motor Corporation		
A New Sensorless Drive Control System for Transmissionless Evs Using a Permanent-Magnet Synchronous Motor	Shinji Shinnaka	Kanagawa University		
3-Phase High Frequency Voltage Input Sensorless Control for Hybrid Electric Vehicle Applications	Nobuyuki Imai	Honda R&D Co., Ltd.		
Sensor-Less Vector Control System Using Concentrated Winding Permanent Magnet Motor	Yoshinori Nakano	Meidensha Corporation		
4E FUEL CELL VEHICLES				
Development of Fuel Cell Hybrid Vehicles in Toyota	Yoshiyuki Miki	Toyota Motor Corporation		
Development of Fuel Cell Vehicles at Nissan	Tadayoshi Hashimura	Nissan Motor Co., Ltd.		
Market Evaluation Report for the Honda Fuel Cell Vehicle	Yoshio Hosono	Honda R&D Co., Ltd.		
Evolutions in Hydrogen and Fuel Cell Standardization: The Harmony Experience	Peter S. J. Van den Bossche	Erasmus Hogeschool Brussel		

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5A HYBRID ELECTRIC VEHICLES		
Development of a HILS Method for Testing Heavy-duty HEVs	Kenji Morita	Japan Automobile Research Institute
Cost-Benefit Analysis of Plug-in Hybrid-Electric Vehicle Technology	Andrew Simpson	National Renewable Energy Laboratory (NREL)
Hybrid Vehicle Control Mode for Daihatsu Hijet Cargo Hybrid	Tsunehiro Sugiyama	Daihatsu Motor Co., Ltd.
Evaluating Hybrid Electric and Fuel Cell Vehicles Using the Capsim Simulation Environment	Jonas Fredriksson	Chalmers University of Technology
5B HYDROGEN & FUEL CELLS		
Fast Response Hydrogen Gas Detector	Hiroki Ishihara	Yazaki Corporation
Enhancement of Catalytic Activity of Ultra-Low Platinum Loading Electrode for PEFC	Kazuhide Totsuka	GS Yuasa Corporation
Development Status of High-Durable MEA	Takeyuki Suzuki	Japan Gore-Tex Inc.
Study of Hydrogen Refueling Station with Photovoltaic Modules	Satoshi Taguchi	Honda R&D Co., Ltd.
5C PUBLIC TRANSPORT		
Development of a System with Fuel Cell and a Way to Supply Hydrogen to Railcars	Masahito Nakagami	East Japan Railway Company
The Energy Control System of Fuel Cell Hybrid Traction System for Railcars	Motomi Shimada	Hitachi, Ltd.
Mobilicity PPT Automated Transport System	Alan T Ponsford	IMechE UK
Feasibility Study on Fuel Cell Railway Traction System	Keiichiro Kondo	Railway Technical Research Institute
5D PROPULSION SYSTEMS		
An Accurate Electromagnetic and Thermal Analysis of Electric Machines for Hybrid Electric Vehicle Application	Gurakuq Dajaku	University of Federal Defense Munich
Development of a New Hybrid Transmission for GS450h	Masatoshi Adachi	Toyota Motor Corporation
Innovative Hybridization of CVT Drivetrains	Roell van Druten	Drivetrain Innovations
Design and Thermal Simulation of Induction Machines for Traction in Electric and Hybrid Electric Vehicles	Christian Kral	Arsenal Research
5E SPECIAL ORAL SESSION: ASIAN EV MARKET		
Beyond Hybrids - Ford Motor Company's Global Approach to Sustainable Mobility	Michael Tamor	Ford Motor Company
Development of Electric Vehicles in India	Chetan Kumar Maini	REVA Electric Car Company (P) Ltd.
The Status of Hyundai Motor Company's Environmentally Friendly Vehicles in Korean Automotive Industry	Ki-Sang Lee	Hyundai-Kia Motors
Outlook of Automobile Industry and EV Commercialization in China	Ching Chuen Chan	The University of Hong Kong

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6A BATTERY MANAGEMENT SYSTEM & COMPONENTS		
Robust Algorithms for a Reliable Battery Diagnosis - Managing Batteries in Hybrid Electric Vehicles	Oliver Sven Bohlen	RWTH Aachen University
Evaluation of Hybrid Electric Vehicle Battery Life in North American Market	Toshiyuki Sakamoto	Honda R&D Co., Ltd.
Adaptive State-Of-Charge Indication System for Li-ion Battery-Powered Devices	Valer Pop	University of Twente
Guidelines for Measurement of Quantity-Of-Electricity in Fuel Consumption Test for HEVs	Ken-ichi Shimizu	National Institute of Advanced Industrial Science and Technology (AIST)
Miniaturization Technology of the Battery Monitoring Unit for HVS	Takumi Shimizu	Denso Corporation
6B HEAVY DUTY HYBRID VEHICLES (ORGANIZED SESSION)		
A Development of New Hybrid Truck & Bus	Ryutaro Hosoya	Hino Motors Ltd.
Development of Hybrid Commercial Vehicle with EDLC	Shougo Nishikawa	Nissan Diesel Motor Co., Ltd.
Series Hybrid Electric Drive System for City Bus	Yuta Susuki	Mitsubishi Fuso Truck and Bus Corporation
Development of Hybrid Diesel Truck as the Main Target for Delivery Vehicle	Akihide Oogushi	Isuzu Motors Limited
Development of in-Wheel Motor Drive System for 4WD Bus	Masanori Nakamura	Toyo Electric Mfg. Co., Ltd.
6C PUBLIC POLICY & MARKETING		
Pv Powered Golf Cart Technical and Economical Viability Study	Jose Carlos Quadrado	Portuguese Electric Vehicle Association (APVE)
The Promotion of Low Emission Vehicles from Subsidies to Eco-Incentives	Marco - Borradori	Canton Ticino
Symbolism and the Adoption of Fuel-Cell Vehicles	Reid Russell Heffner	University of California, Davis
Status of the California Zero Emission Vehicle (ZEV) Regulation and the California Air Resources Board 2006 - 2007 ZEV Technology Review	Craig M Childers	California Air Resources Board (CARB)
6D PROPULSION SYSTEMS		
Short Term Overload Capability of Switched Reluctance Drives	Stefan E. Bauer	RWTH Aachen University
Advanced Redundancy Technology for a Drive System Using in-Wheel Motors	Kiyomoto Kawakami	Keio University
FPGA-Based Real-Time Simulation of Permanent Magnet Synchronous Motor Drive for Vehicular Applications	Christian Dufour	Opal-RT Technologies
Electric Vehicle Independent Drive-Control System (EVIDs)	Ray M Ayres	Silicon Valley Group Ltd
High Power Axial Flux Permanent Magnet Machines for Hybrid Vehicle Applications	Michael Ulrich Lamperth	Imperial College London
6E FUEL CELL VEHICLES & INFRASTRUCTURE		
Fuel Cell Vehicle System Utilizing a Supercapacitor Coupled Hybrid Battery	Stephen Raiser	General Motors Corporation
Recent Challenges of Hydrogen Storage Technologies for Hydrogen-Powered Fuel Cell Vehicles	Katsuhiko Hirose	Toyota Motor Corporation
The Development of Nissan 70-Mpa Hydrogen Storage System for FCVs	Tomoyuki Hanada	Nissan Motor Co., Ltd.
World-Wide Efforts for Hydrogen Fuel Infrastructure Creation	Juhani Kalervo Laurikko	VTT Technical Research Centre of Finland
"Thda" - Stack Monitoring with Significantly Reduced Instrumentation	Erich Ramschak	AVL List GmbH