



# 1st INTERNATIONAL ENERGY CONVERSION ENGINEERING CONFERENCE

## Final Program

17-21 AUGUST 2003

RENAISSANCE PORTSMOUTH  
PORTSMOUTH, VIRGINIA



## FINAL PROGRAM

### 2<sup>ND</sup> INTERNATIONAL ENERGY CONVERSION ENGINEERING CONFERENCE AND EXHIBIT

16-19 August 2004  
The Westin Providence/Rhode Island Convention Center  
Providence, Rhode Island

# I E C E C

Sponsored by



Participating Societies



Interagency Advanced Power Group



Heat Transfer Society of Japan



IEEE Aerospace & Electronic Systems Society



IECEC

# 3rd International Energy Conversion Engineering Conference

## Final Program

15-18 August 2005

Hyatt Regency San Francisco  
at Embarcadero Center  
San Francisco, California



American Institute of Aeronautics and Astronautics

# 4th International Energy Conversion Engineering Conference

## FINAL PROGRAM

26-29 June 2006

Sheraton San Diego Hotel and Marina  
San Diego, California

Hosted by:



Participating Organizations:

The Heat Transfer Society  
of Japan Advanced Energy  
Conversion Group

The IEEE Aerospace and  
Electronic Systems Society  
(AESS)

The Egyptian Society of  
Mechanical Engineers (ESME)

[www.aiaa.org/events/iecec](http://www.aiaa.org/events/iecec)

## Thursday, 29 June 2006, continued

### 1600 68-APS-15 Power Management and Distribution II

Chaired by: G. CARR, Jet Propulsion Laboratory, Pasadena, CA, and W.

- 1600 AIAA-2006-4173  
**Modular High Power Density Multi-Port Power Converter For Aerospace Applications**  
Z. Daboussi, G. Velez and S. Mondal, AeroVironment Inc., Monrovia, CA
- 1630 AIAA-2006-4174  
**Power Actuation and Switching Module (PASM) Test Results**  
G. Carr, Jet Propulsion Laboratory, Pasadena, CA
- 1700 AIAA-2006-4175  
**Insulation Design of Printed Circuit Boards Under Electron Irradiation**  
H. Fujii, Nara National College of Technology, Yamato-koriyama, Nara, Japan; T. Hasagawa and T. Nishida, Tokyo, Japan

### 1600 69-EC-13 Combustion II

Chaired by: C. LEE and V. LYONS, NASA Glenn Research Center, Cleveland, OH

- 1600 AIAA-2006-4176  
**Thermodynamic Cycle Analysis of Combustion Wave Rotors**  
P. Akbari and R. Nalim, Indiana University-Purdue University at Indianapolis, Indianapolis, IN
- 1630 AIAA-2006-4177  
**Hydrogen Generation by Arc Discharge in Moisture**  
Y. Tanaka, Oet Company Ltd., Kobe, Japan; T. Mizuno, Hokkaido University, Sapporo, Japan
- 1700 AIAA-2006-4179  
**MEMS-Based Fuel Reformer Integrated with Catalytic Combustor Using CarbonNanoTubes**  
D. Park, T. Kim, S. Kwon and C. Kim, Korea Advanced Institute of Science and Technology, Daejeon, Korea

### 1600 70-FREPS-10 Distributed Energy and Hybrid Systems

Chaired by: M. GAFFNEY, Army Research Laboratory, Ft. Belvoir, VA

- 1600 AIAA-2006-4180  
**A Novel Pressurized CHP System with Water Extraction**  
J. Khan, W. Lear, S. Sheriff and E. Howell, University of Florida, Gainesville, FL; J. Crittenden, TriStar Energy Services, Cleveland, OH
- 1630 AIAA-2006-4181  
**Optimization of a Cogeneration System Operation Strategy - Fuel/Electricity Cost Relation**  
J. Fonseca, H. Asano, T. Fujii and S. Hirasawa, Kobe University, Kobe, Japan
- 1700 AIAA-2006-4182  
**Distributed Heterogeneous Simulation of a Hybrid-Electric Vehicle**  
N. Wu, C. Rands, C. Lucas, E. Walters and M. Hasan, PC Krause and Associates Inc., West Lafayette, IN
- 1730 AIAA-2006-4183  
**Analysis of Micro Gas Turbine Cogeneration System with Biogas Storage System**  
S. Naing, T. Yamada and K. Nakanishi, Kitami Institute of Technology, Kitami, Japan