



University of Hawai'i at Mānoa

## **Hawai'i Natural Energy Institute**

School of Ocean & Earth Science & Technology

# **Performance Distribution in Direct Methanol Fuel Cells**

The nature of direct methanol fuel cells (DMFCs) significantly differs from that of hydrogen-powered polymer electrolyte fuel cells. In DMFCs, the combination of employment of a polarized liquid fuel together with high anode and cathode overpotentials creates performance distributions due to trade offs of loss mechanisms in the cell. Performance distributions were studied as a function of key DMFC operating parameters. These distributions are discussed by focusing on cause and effect, increasing the overall understanding of DMFC fuel cells.

**Guido Bender**

Assistant Specialist

Hawaii Natural Energy Institute

**Tuesday, May 16, 2006**

**3:15 – 4:15 PM**

**POST 723**

**Sponsored by**

**Hawai'i Natural Energy Institute**