PART 4: ADVANCED DIAGNOSTICS, MODELS, & DESIGN.

Low-Temperature Fuel Cells.


42. Heat and water transport models for polymer electrolyte fuel cells (U. Pasaogullari).


45. Local transient techniques in polymer electrolyte fuel cell (PEFC) diagnostics (I. A. Schneider and G. G. Scherer).


47. Performance during start-up of proton exchange membrane (PEM) fuel cells at subfreezing conditions (E. L. Thompson, W. Gu, and H. A. Gasteiger).


49. Modeling the impact of cation contamination in a polymer electrolyte membrane fuel cell (T. A. Greszler, T. E. Moylan, and H. A. Gasteiger).

50. Performance modeling and cell design for high concentration methanol fuel cells (C. E. Shaffer and C. Y. Wang).

51. Design concepts and durability challenges for mini fuel cells (Shimshon Gottesfeld).

High-Temperature Fuel Cells.

52. New diagnostic methods for the polarized state (T. Kawada).


54. Observation and modeling of thermal stresses in cells and cell stacks (H. Yakabe).

PART 5: PERFORMANCE DEGRADATION.

Low-Temperature Fuel Cells.