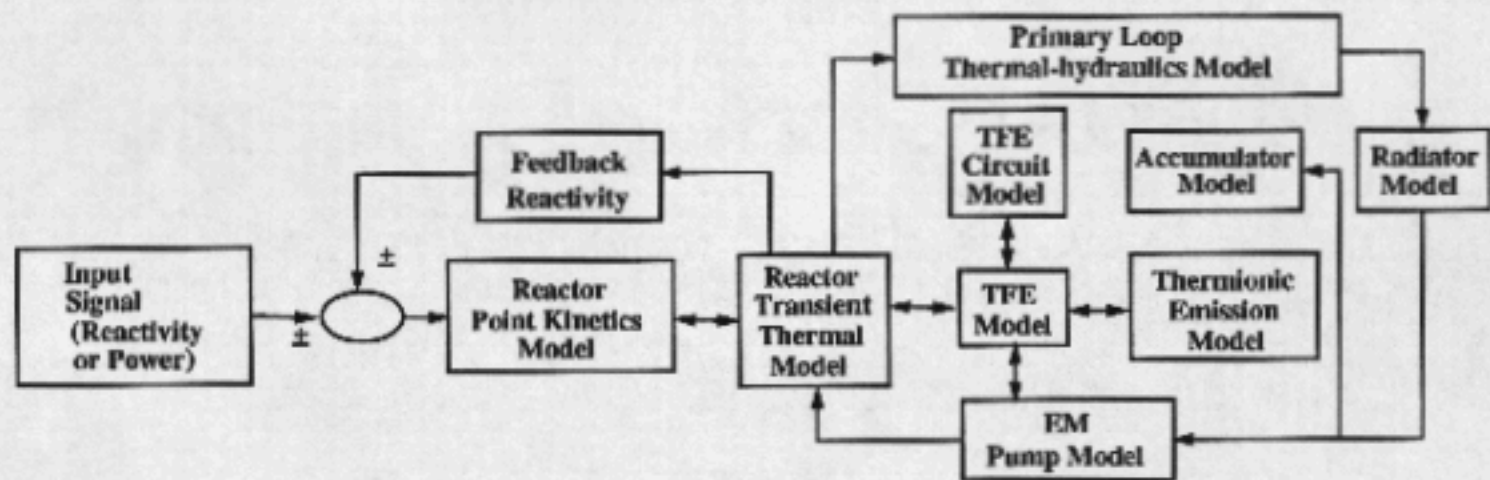


" TITAM "

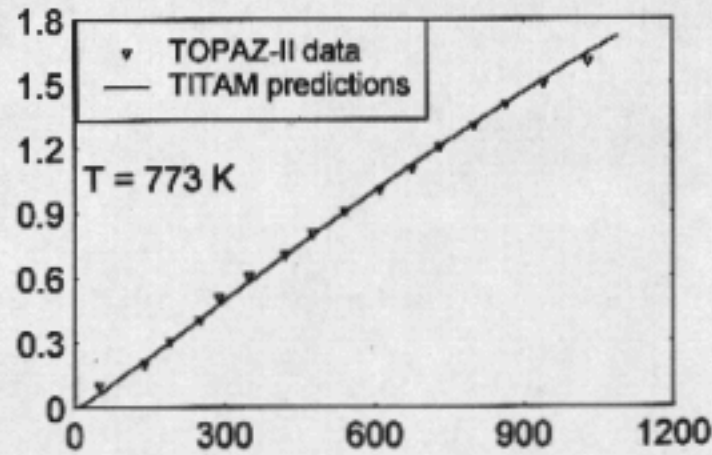
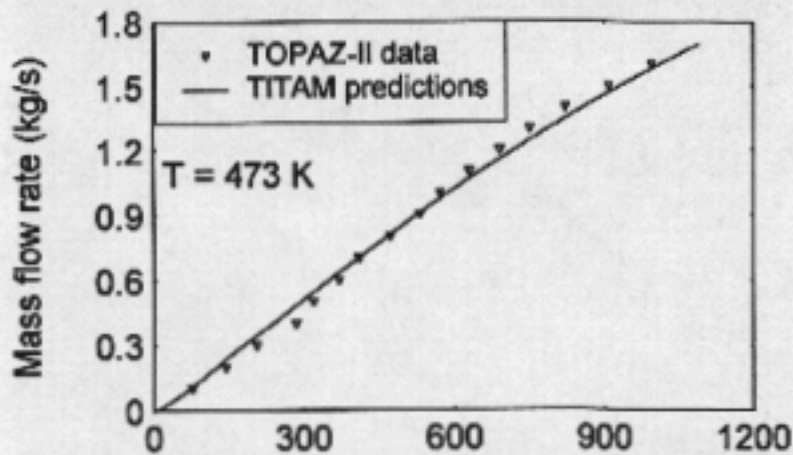
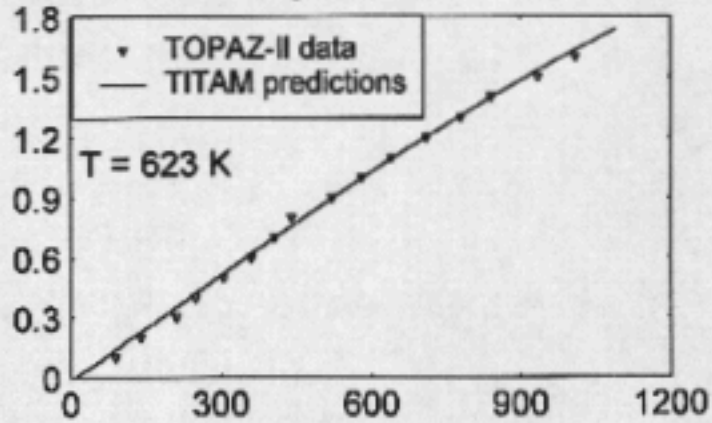
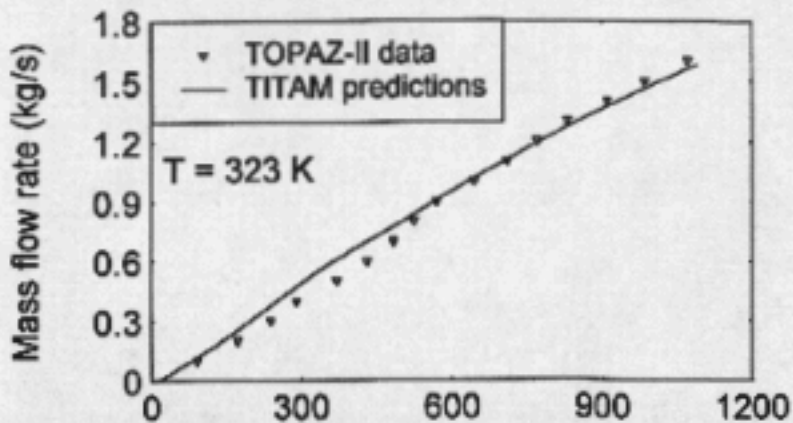
Thermionic Transient Analysis Model for TOPAZ-II Space Nuclear Power System



CAPABILITIES

- Design Optimization and Analysis of Fully Integrated Single-cell TFEs
- Analysis of Transient and Steady-State Operation of TOPAZ-II System
- TOPAZ-II System Safety and Failure Analyses

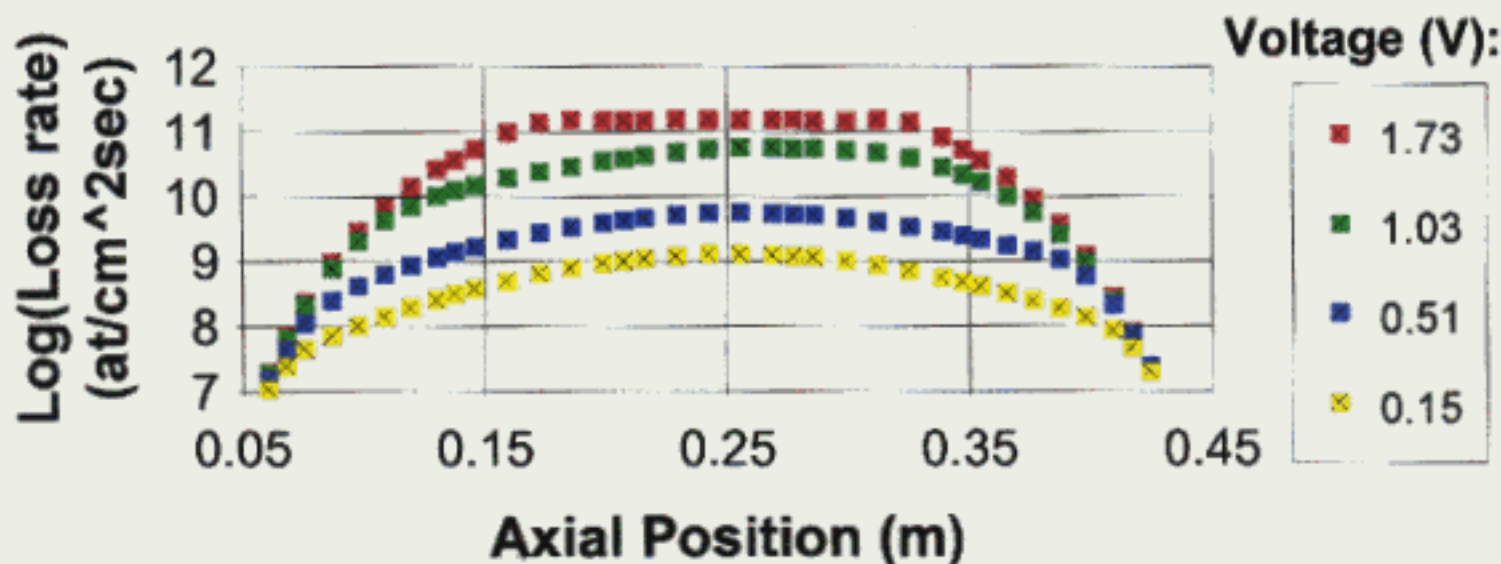
Verification of the TOPAZ-II EM-Pump Model



Pump current (A)

Pump current (A)

Calculated Tungsten Loss Rate (Pcs=1 torr, O/Cs=1e-8, Q=3500 W)



Effect of Oxygen Presence on TFE Output Power (Pcs=1 torr, Q=3500 W)

