

ALKALI METAL THERMAL-TO-ELECTRIC CONVERSION (AMTEC)

- ◆ NASA's 1st choice for Europa (2003, ~ 200 We) and Pluto-Express (2005, 250 We) with ^{238}Pu -GPHs blocks
- ◆ Show stoppers: refractory alloy structure, high specific mass (50 g/We), low efficiency (< 15%), lifetime degradation, metal-ceramic braze, electrodes, β "alumina, parasitic losses
- ◆ Optimization and stress analysis of light mass refractory cells (< 25 g/We)
- ◆ Develop high Power AMTECs for topping cycle of long-life nuclear power plants 3-5MWe and 10-50MWe (NERI/WH)



