

INTERIM REPORT

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Contract Program or Project Title: Thermal Hydraulic LMFBR and LWR Safety Experiments

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Monthly Highlights

for

June 1982*

Thermal-Hydraulic LMFBR and LWR Safety Experiments
FIN No. A-3024

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1. Thermal-Hydraulic Reactor Safety Experiments

1.1 Heat Transfer in Core-Concrete Interactions: Liquid-Liquid Heat Transfer (G. A. Greene)

Efforts to develop a sampling probe, based upon isokinetic sampling theory, with which to measure entrainment rate are continuing.

1.2 Heat Transfer in Core-Concrete Interactions: Coolant Layer Heat Transfer (G. A. Greene)

No progress during this reporting period.

1.3 Core Debris Thermal-Hydraulic Phenomenology-Steam Spike Phenomenology (T. Ginsberg, N. Tutu)

To test the validity of Lipinski's particle-bed dryout model, preliminary experiments to measure the relative permeability of particle beds to two phase air-water mixtures were conducted. Results indicated that for large particle sizes (diameter $\geq 3\text{mm}$), Lipinski's model underpredicts the resistance to the gas phase.

1.4 General Programmatic Activities

None to report.

Monthly Distribution List

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