Advanced Nuclear Systems Group & Computational Fluid Dynamics Group

Direct Numerical Simulation of Sodium Boiling Flows with PSI-BOIL

Background: SFR research in ANS & boiling simulations done in CFD
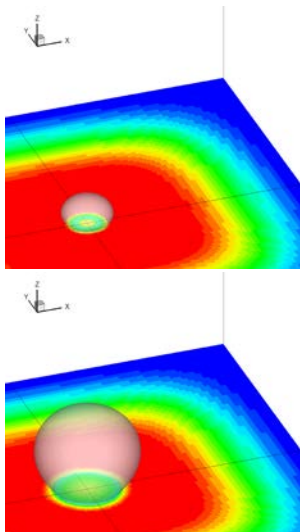
SFR research is a long-term goal of ANS,

DNS of boiling in CFD is state-of-the-art.

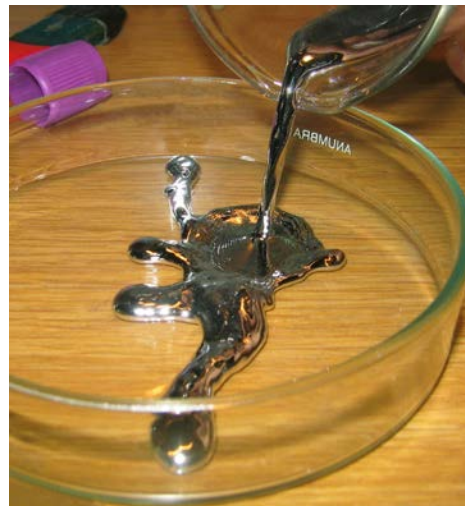Cooperation between groups established.

Current status at LSM:

Boiling simulations done mostly for water.
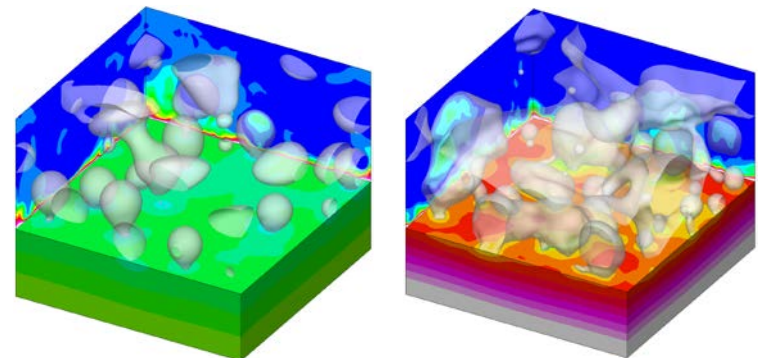Several joint ANS-CFD theses defended.

Your Task:

Perform boiling simulations for *sodium*.

Single-bubble nucleation

Liquid sodium*

Boiling regime transition