SIMULATION OF DROPLETIZATION, VAPORIZATION AND COMBUSTION OF LIQUIDS SURROUNDING CHARGES

R. Löhner¹, J.D. Baum², F. Togashi², O.A. Soto²

¹CFD Center, George Mason University, Fairfax, VA 22030, USA; ²Applied Simulations, Inc., McLean, VA 22101, USA

ABSTRACT

Compressible and near-incompressible solvers, together with particle update techniques and chemistry packages are combined in order to compute complex multiphase flows that include dropletization, vaporization and subsquent combustion.