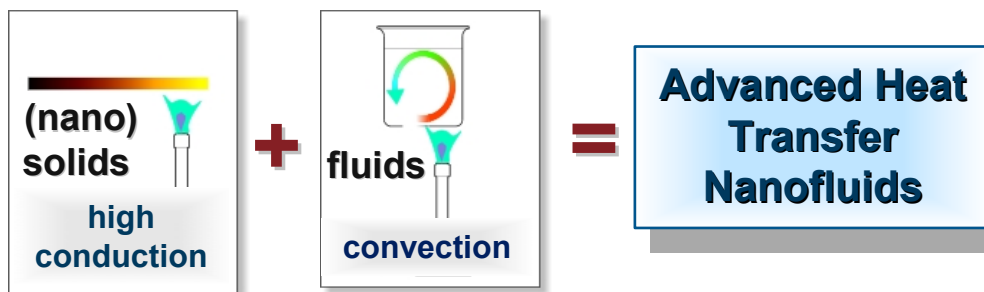


P-14 Nanofluid Development for Engine Cooling

Elena Timofeeva, Jules Routbort, Dileep Singh, Wen Yu, David Smith, David France

Scientific/Technical Opportunity

Applications



Objectives

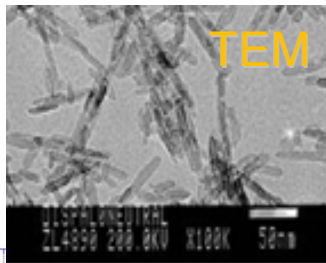
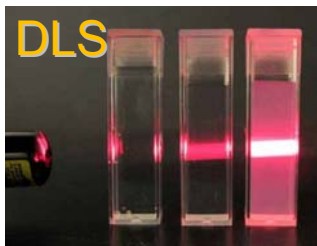
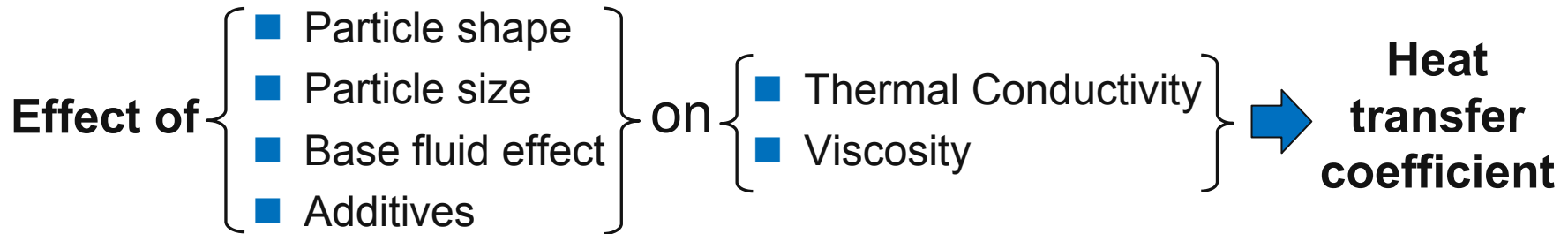
- Development of experimental database and theoretical understanding of thermo-physical properties of nanofluids



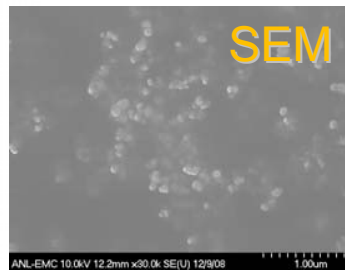
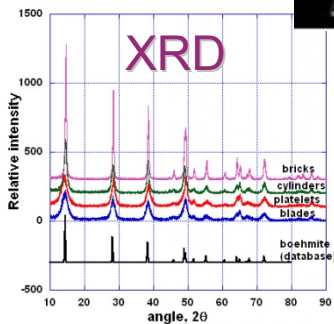
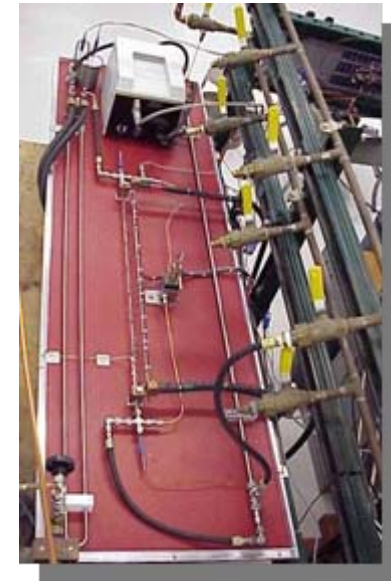
- Engineering of high efficiency coolants that would allow to reduce system size and increase overall efficiency

P14 Experimental Approach:

■ Optimization of material properties for nanofluid manufacturing



Rotational
Viscometer



■ Testing of nanofluid performance at various temperatures