

### **3S Laboratory for Petroleum Research in Well Stimulation**

The mission of the reservoir Simulation, Stimulation and Strategy Laboratory (3S Lab) is to build new knowledge and develop new technologies for evaluation and stimulation of low-permeability reservoirs (ultra-tight gas, shale gas, and shale oil) and to educate future engineers and leaders in petroleum and the broader energy area. The vision is to stay focused and be the best we can in our chosen 3S area.

3S Laboratory consortium combines industrial and academic resources to solve engineering problems facing the oil and gas industry. The major areas of research include laboratory evaluation of fracture fluids, proppant, additives, and flowback fluids; numerical simulation of hydraulic fracture propagation; fluid cleanup; and long-term oil/gas recovery in low-permeability reservoirs. More information can be found at [3s.ems.psu.edu](http://3s.ems.psu.edu).

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