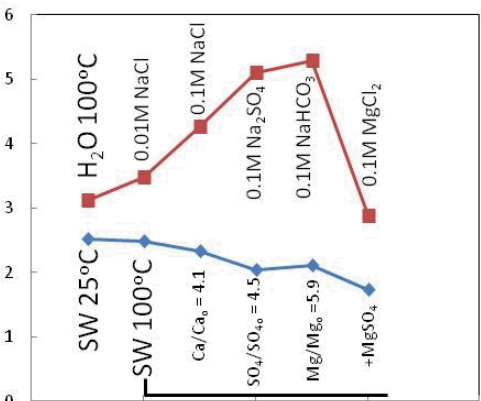
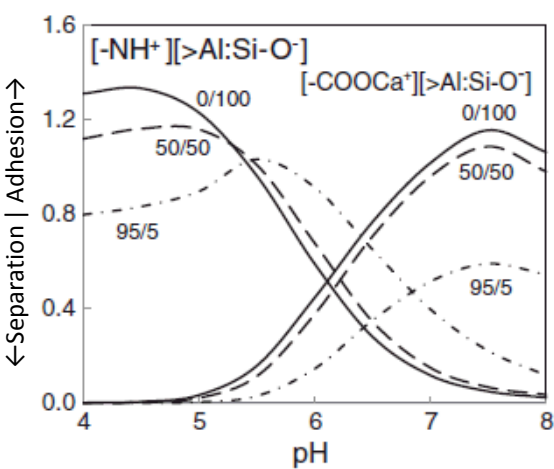


Surface Coordination and Improved Oil Recovery from Chemical Waterfloods -

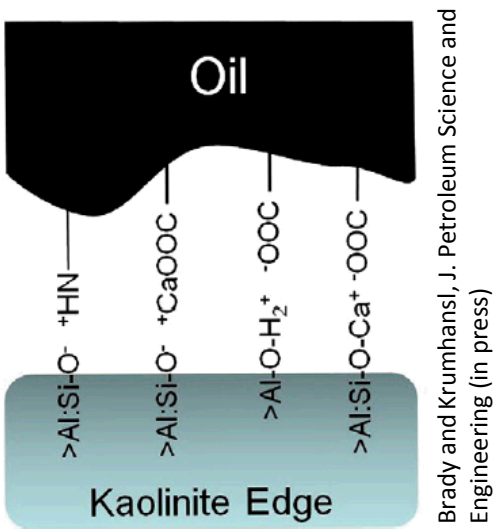
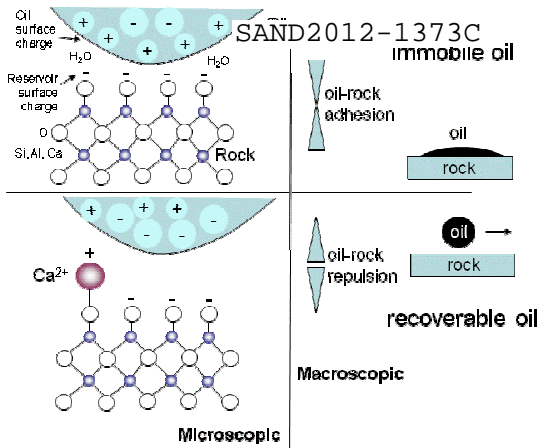
Patrick V. Brady, Sandia National Laboratories

Surface Coordination Model gives clearer picture of Oil-Reservoir Adhesion to allow:

- Improved interpretation of waterflood recoveries and coreflood tests and,
- More precise design of chemical waterfloods.



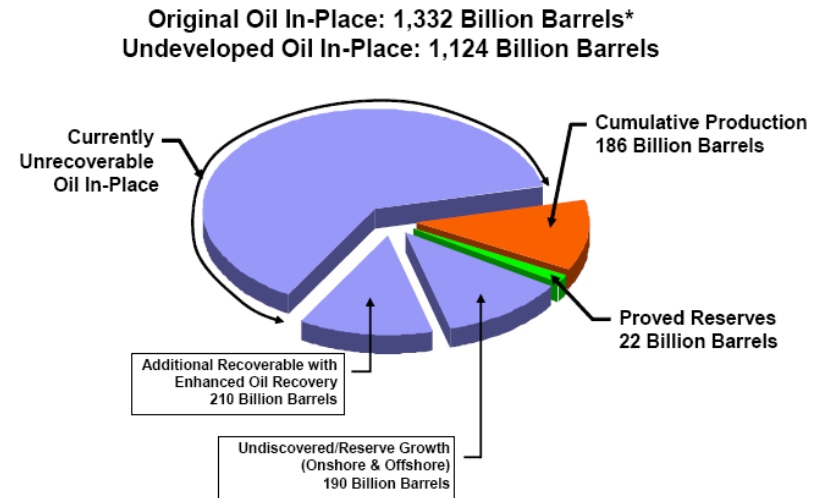
Brady and Krumhansl, J. Petroleum Science and Engineering (in press) and
Brady and Mariner, J. Petroleum Science and Engineering (in review)



Brady and Krumhansl, J. Petroleum Science and Engineering (in press)

Business Plan

1. Design field-specific chemical waterfloods (Brady, through contract with Sandia),
2. Optimize waterflood pre-treatment (Huang),
3. A. Contract with individual field owners,
B. Buy and rehabilitate non-producing fields,
C. ?



*From DOE, 2006. UNDEVELOPED DOMESTIC OIL RESOURCES: THE FOUNDATION FOR INCREASED OIL PRODUCTION AND A VIABLE DOMESTIC OIL INDUSTRY

Risks

1. It won't work,
2. It *decreases* recovery,
3. It works, but others figure out how to do it.