



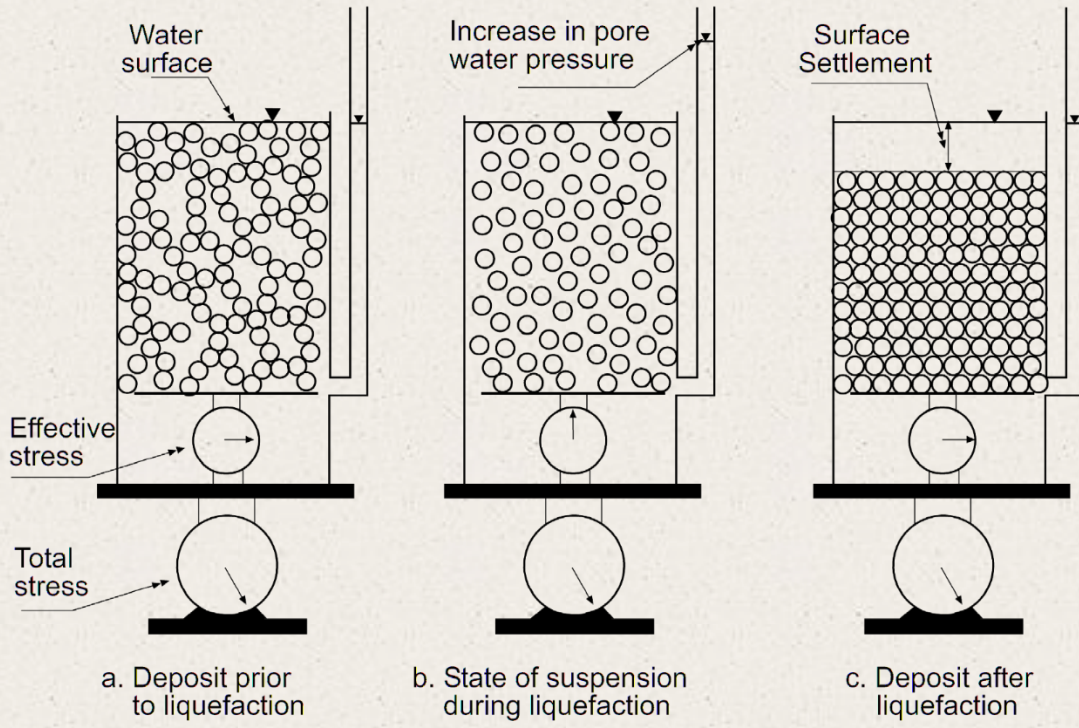
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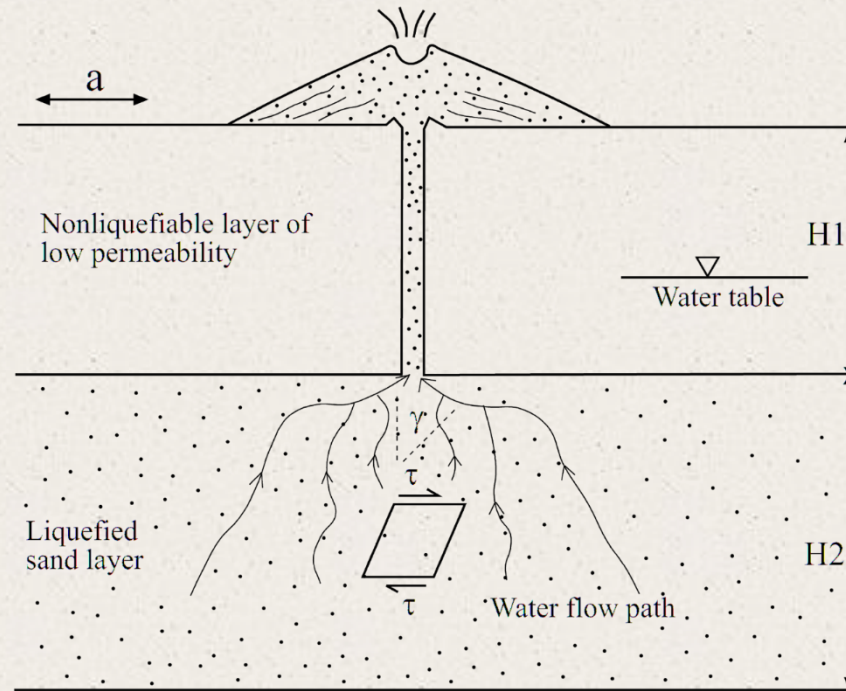
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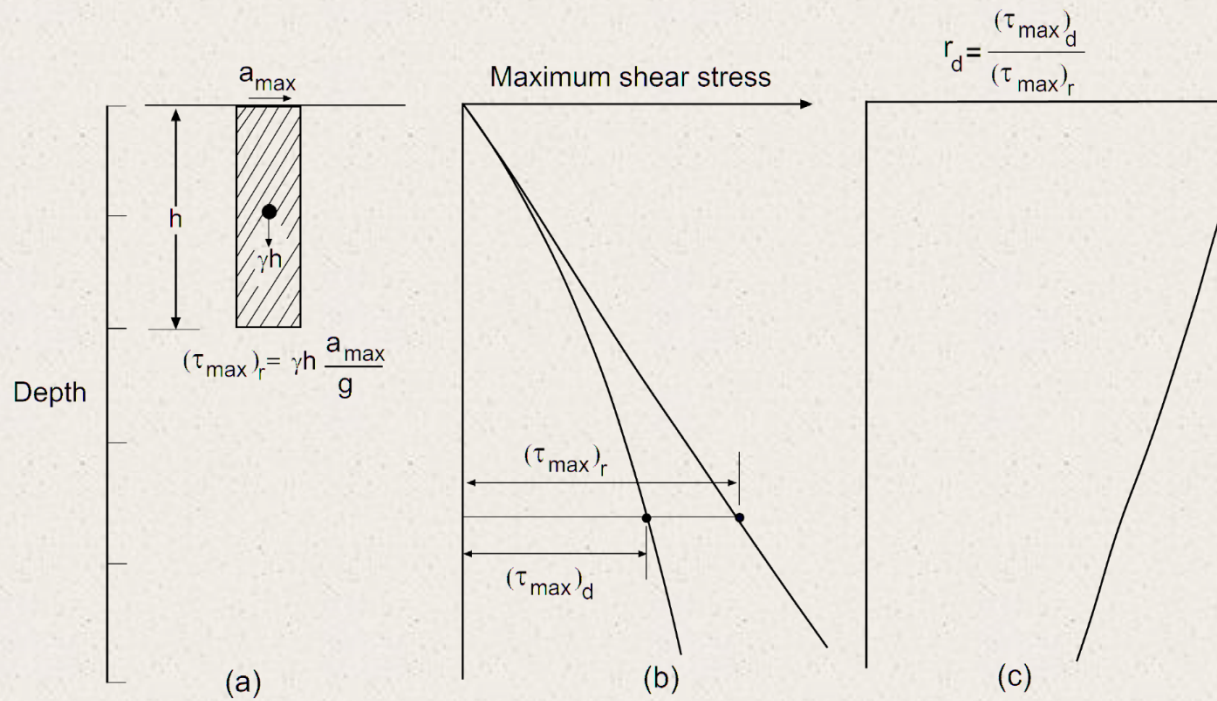
Ders Notları 9.Hafta
Zemin Sıvılaşması

Dr. Koray ULAMIŞ

Ankara

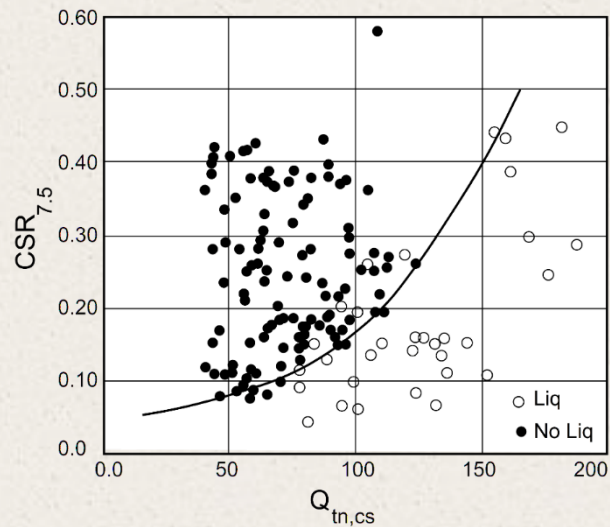
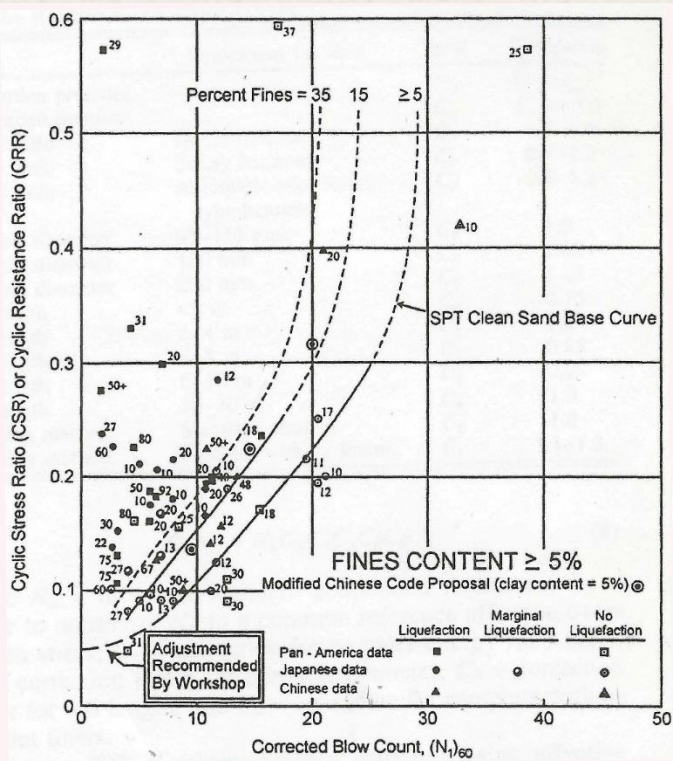


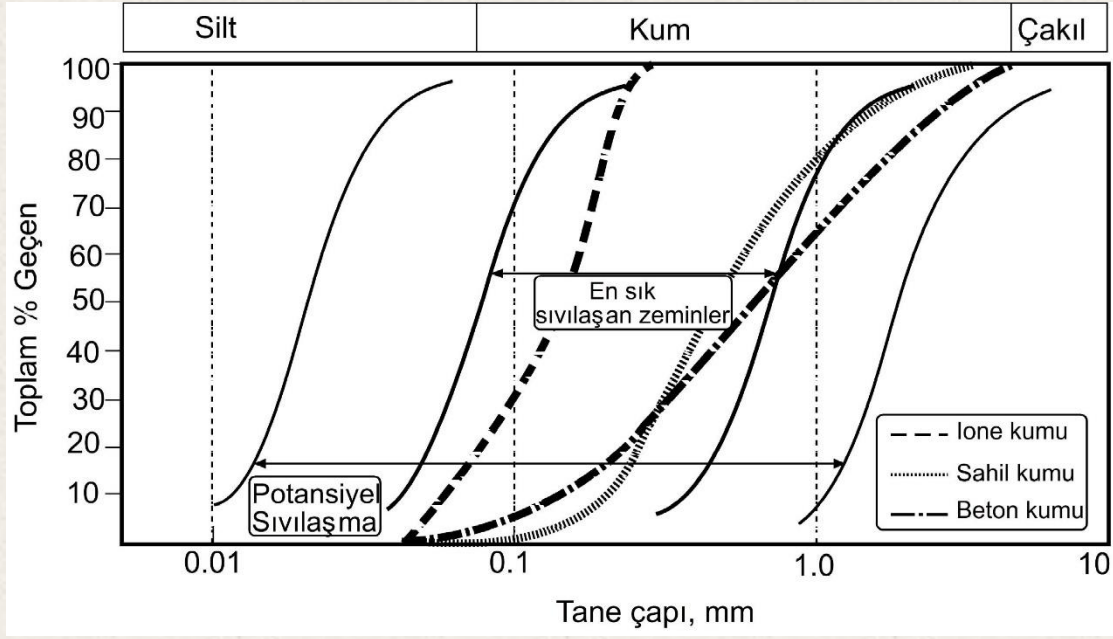


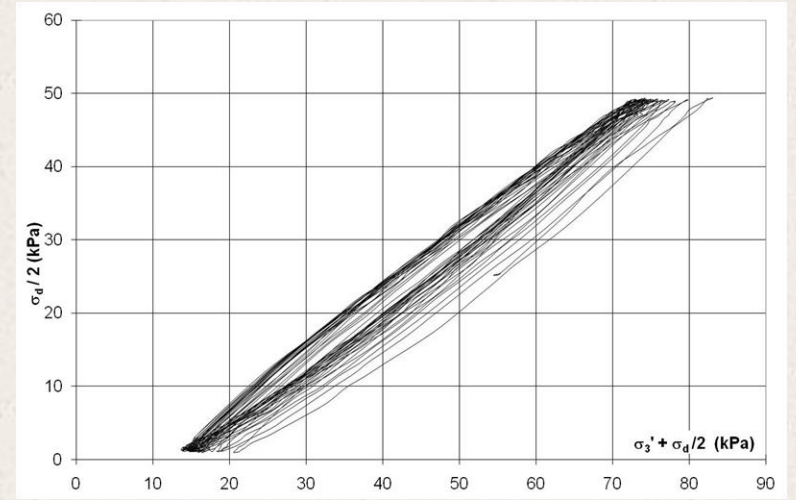
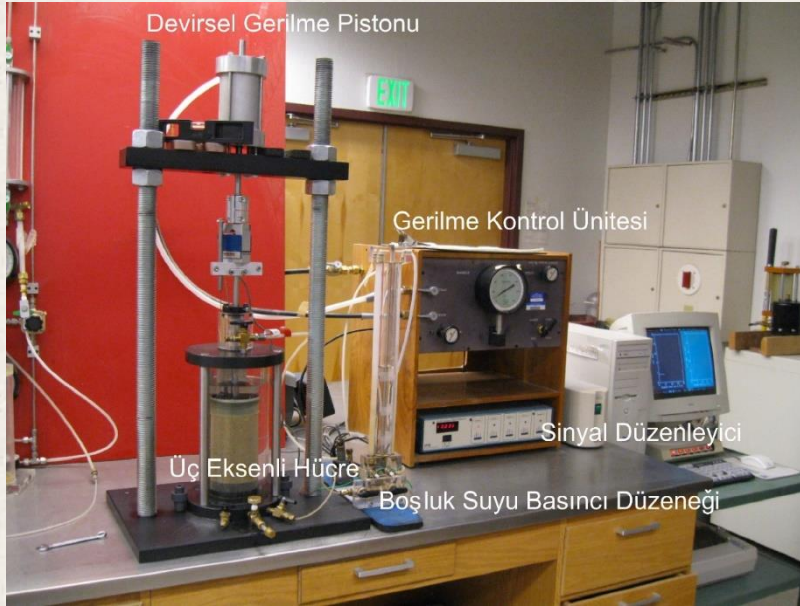


Determination of maximum shear stress

$$\text{CSR} = \frac{\tau_h}{\sigma'_v} = 0.65 \times \frac{a_{\max}}{g} \times \frac{\sigma_0}{\sigma'_v} \times r_d \quad (5)$$









2011 Van depremi (Emre, et al. 2011)



2011 Y.Zelanda Christchurch depremi (Cubrinovski, et al. 2012)



1971 St. Fernando depremi sonrası Lower San Fernando barajında dolgunun hareket etmesi

(Steinbrugge Collection, EERC, University of California at Berkeley)



Sapanca otelinde yanal yayılma sonrası göle doğru hareket

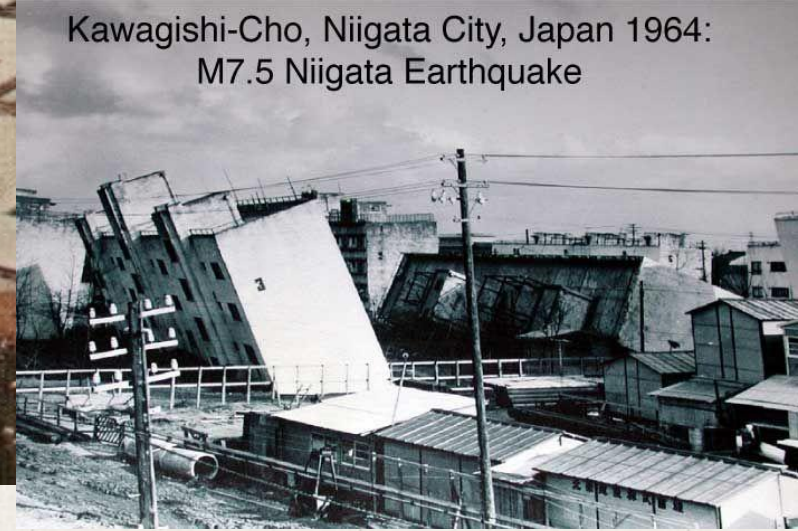
(Aykut Barka, ITU)



1964 Alaska depreminde Turnagain Heights yanal yayılma ve sığ yamaç hareketleri



Kawagishi-Cho, Niigata City, Japan 1964:
M7.5 Niigata Earthquake



*1964 Niigata-Japonya depremi sonrası Kawagishicho
binalarının tilt hareketi(Kawasumi, 1968)*



17 Ağustos Marmara depremi sonrası Adapazari'nda yan yatan yapılar(Erdik, 2000).