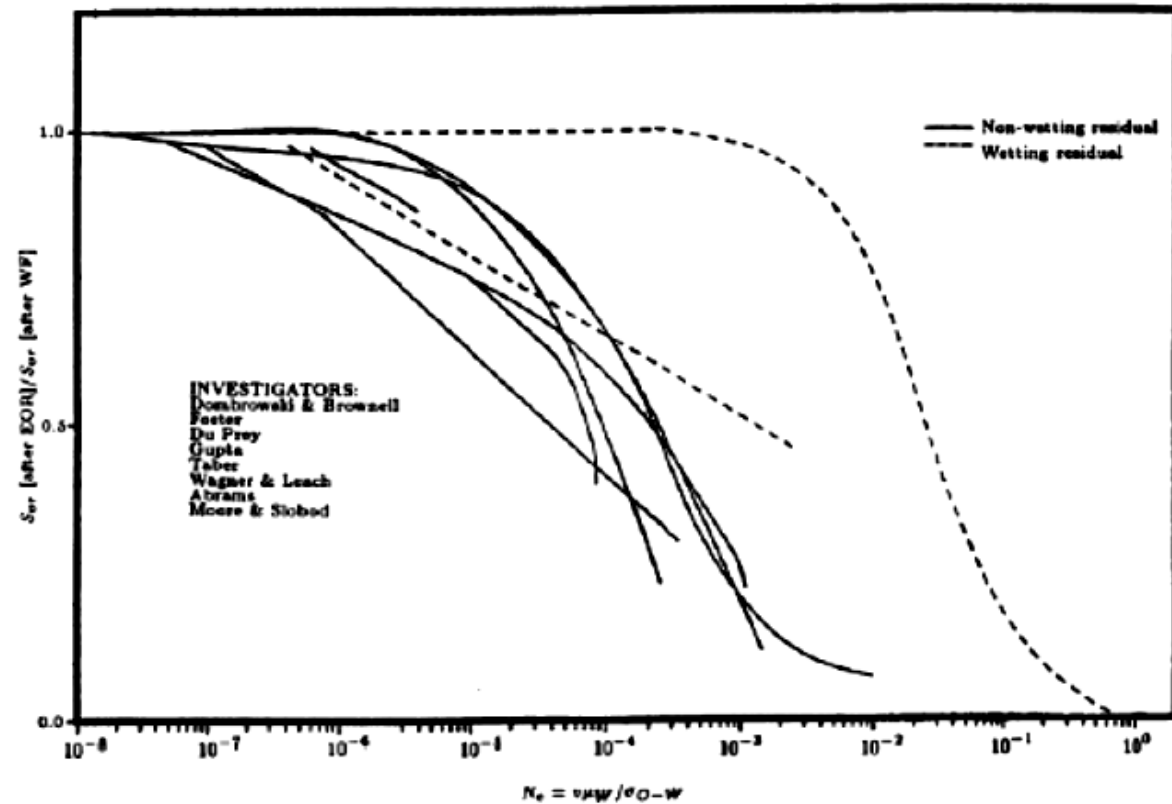


PRINCIPIOS FISICOQUÍMICOS DE RECUPERACIONES ASISTIDAS POR INYECCIÓN DE QUÍMICOS

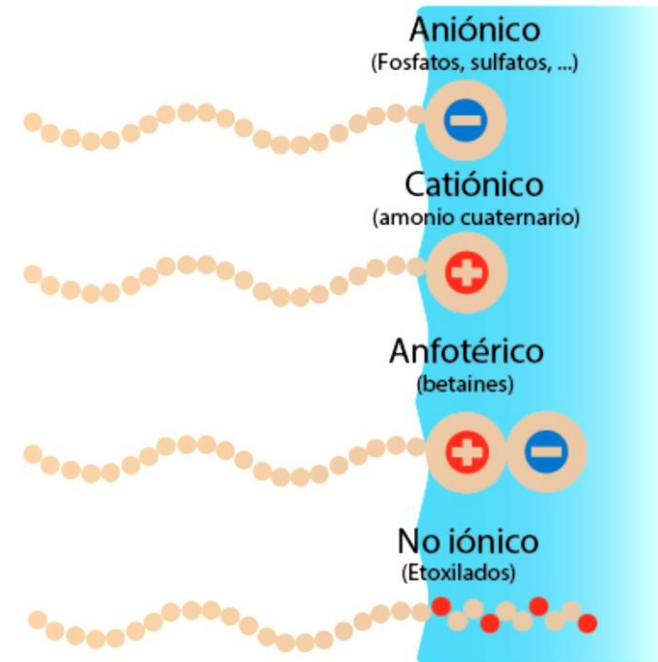
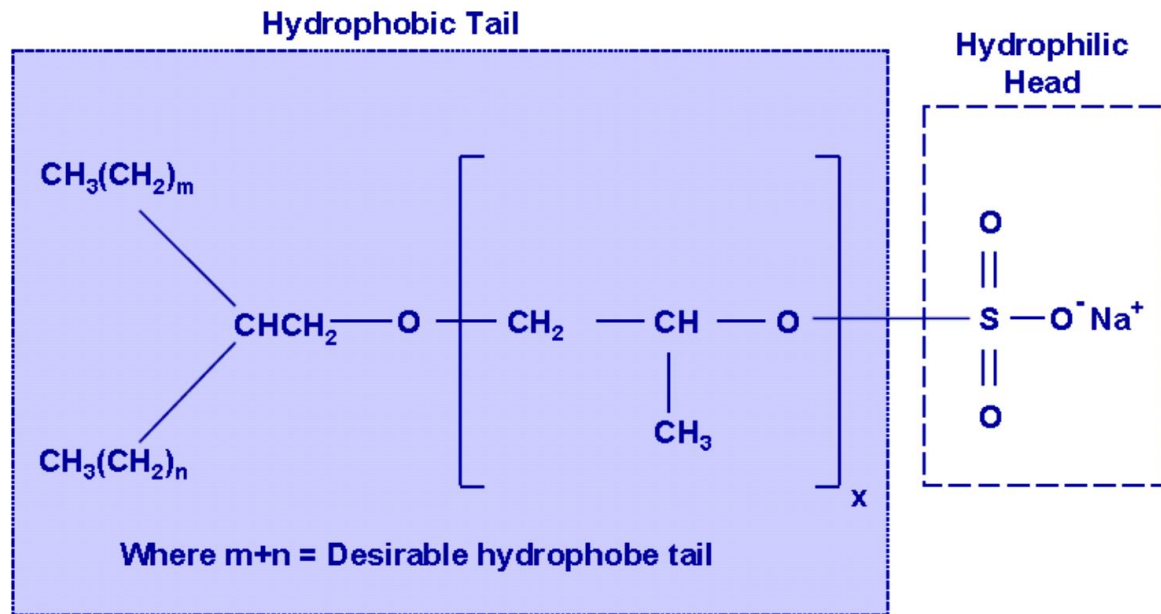
NÚMERO CAPILAR

$$N_c = \frac{v \mu_w}{\sigma_{ow}}$$

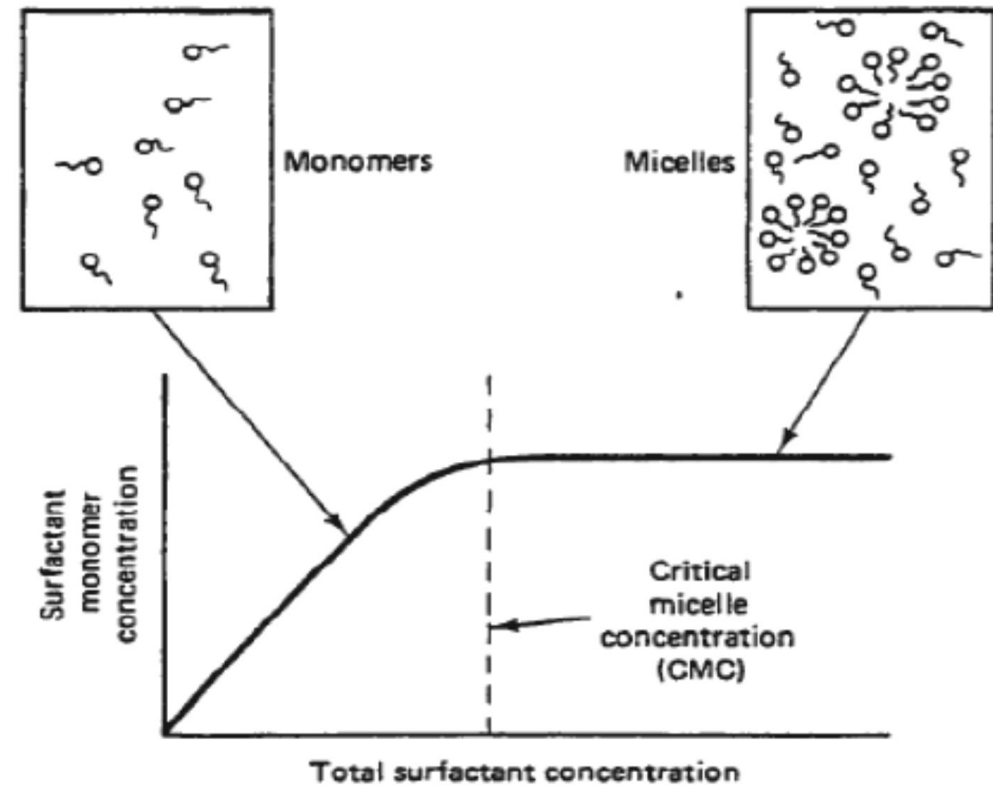
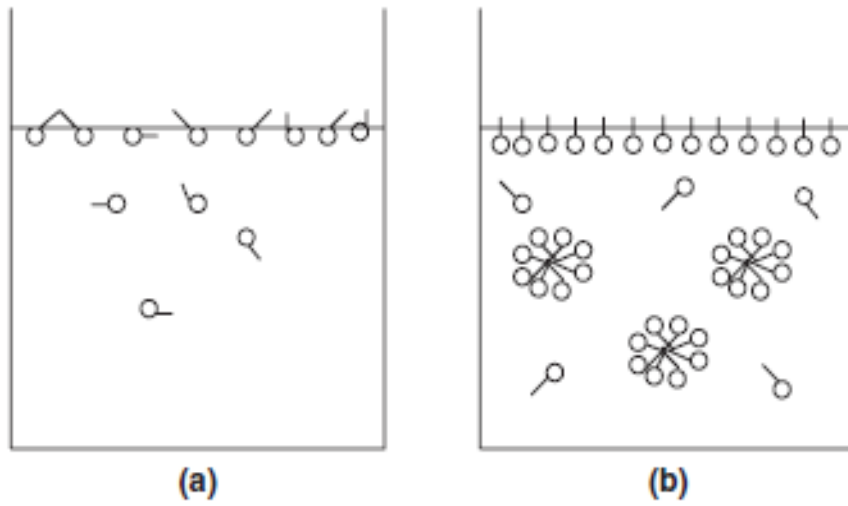


SURFACTANTES

Fuente:www.snf.com



CMC



DIAGRAMAS WINDSOR

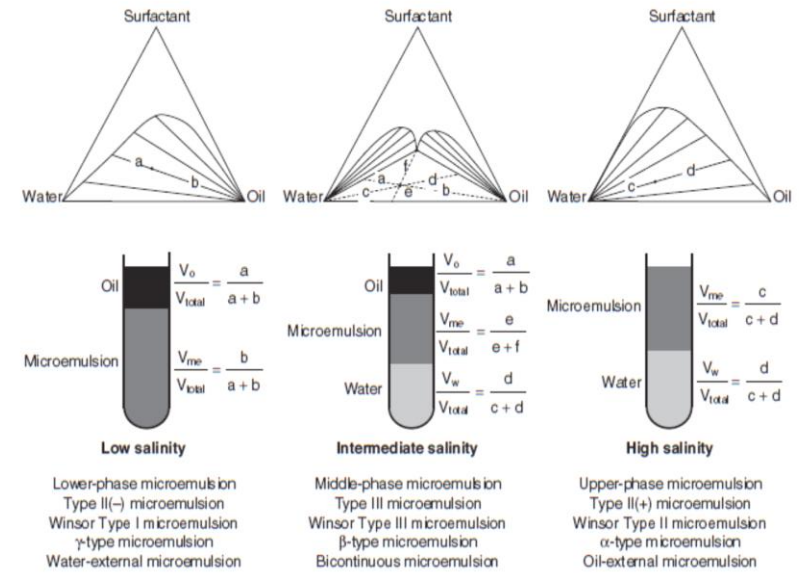
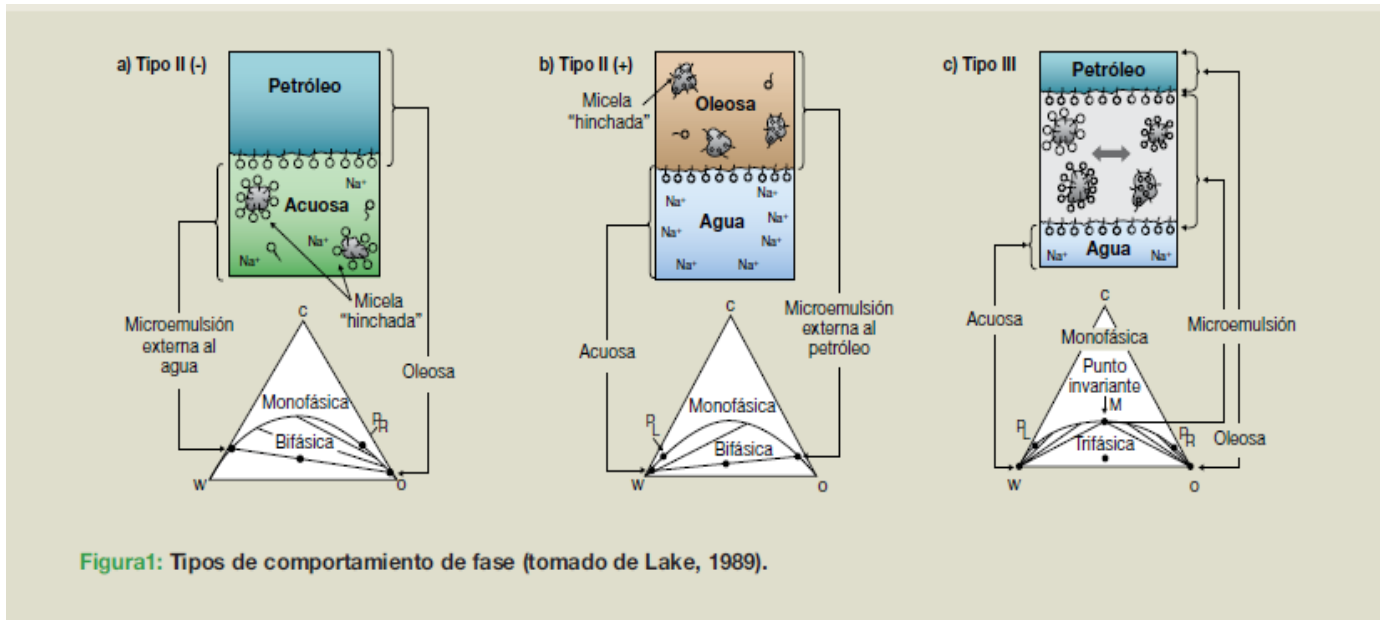
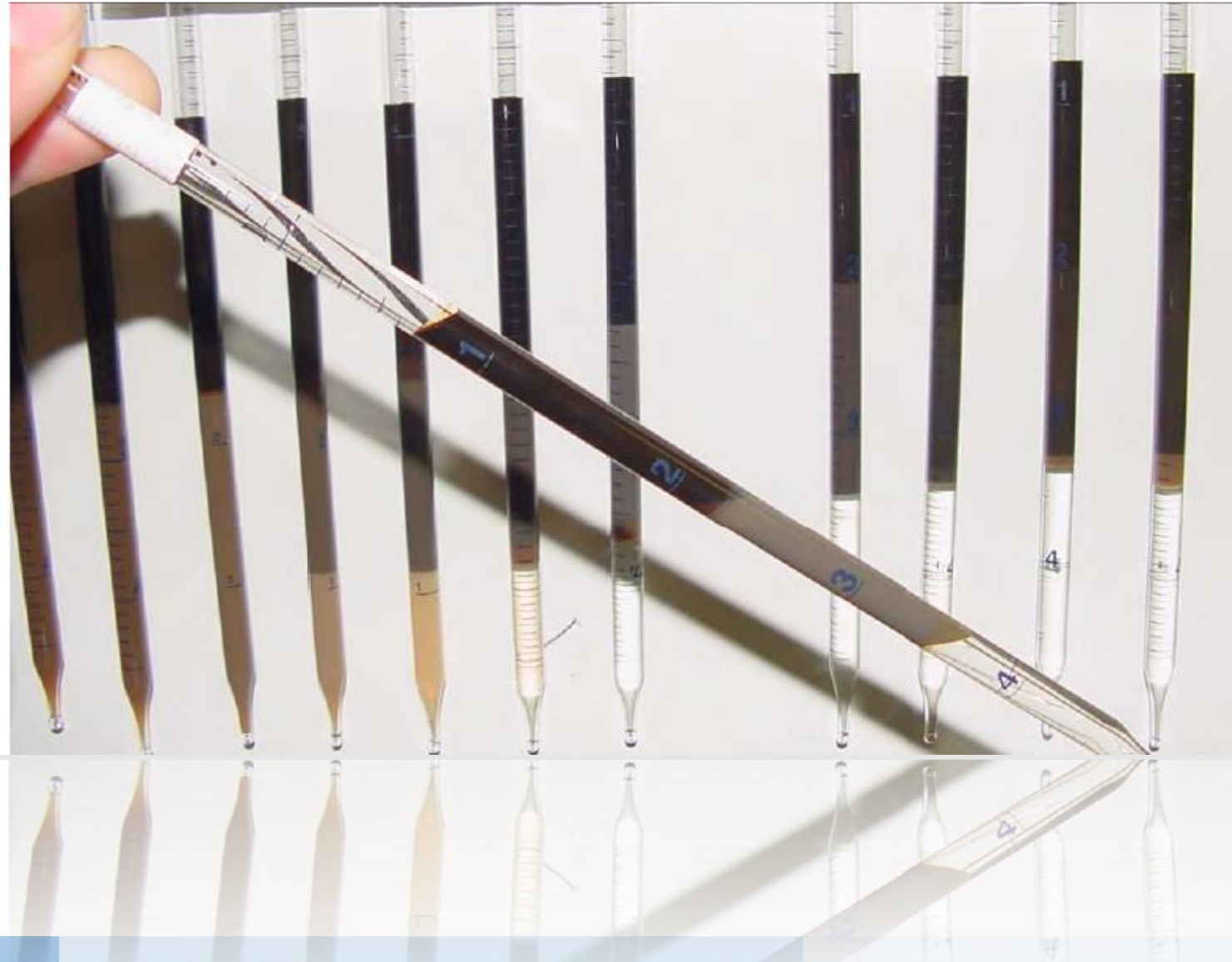


Figura 1: Tipos de comportamiento de fase (tomado de Lake, 1989).

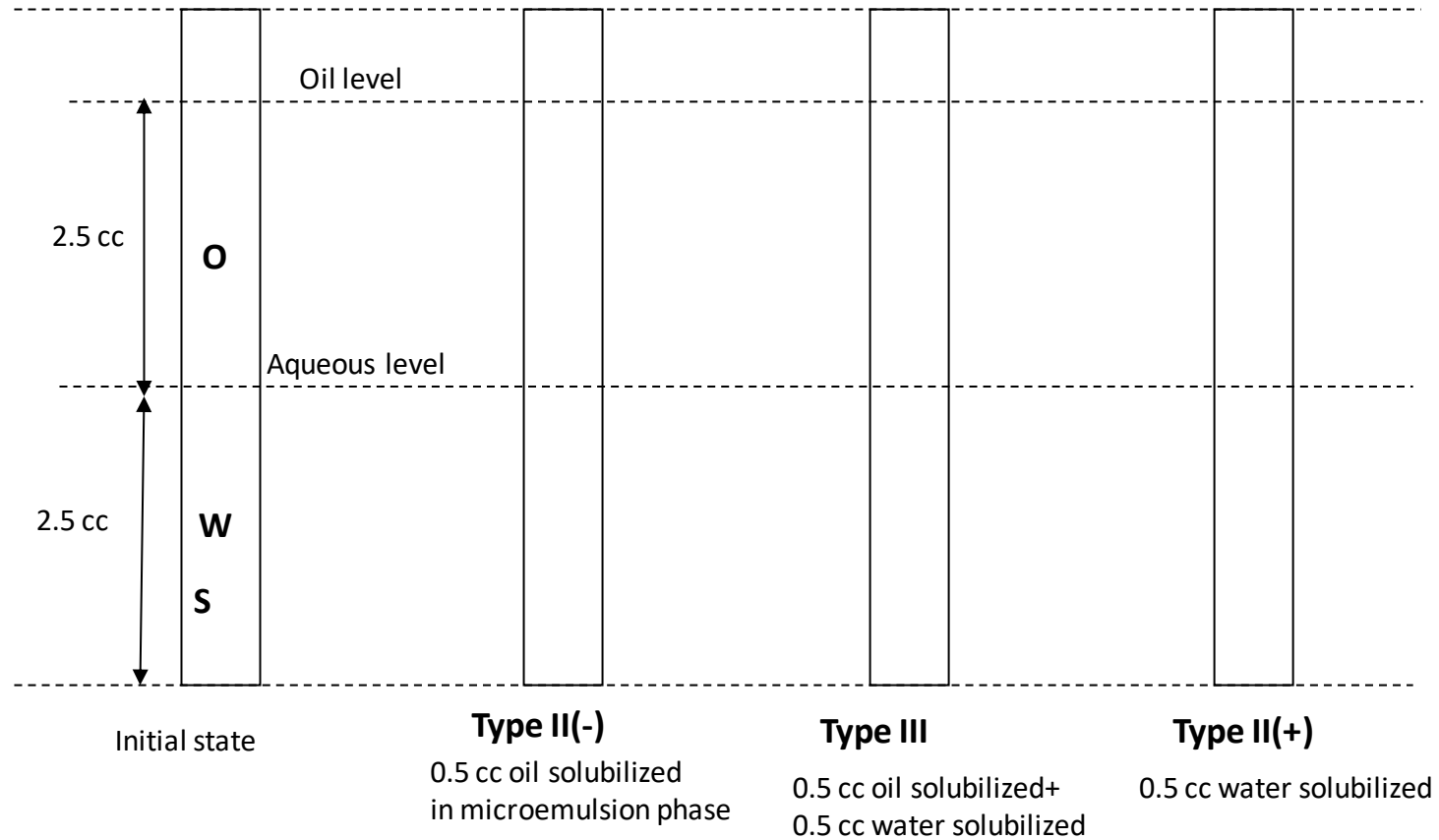


COMPORTAMIENTOS DE FASES

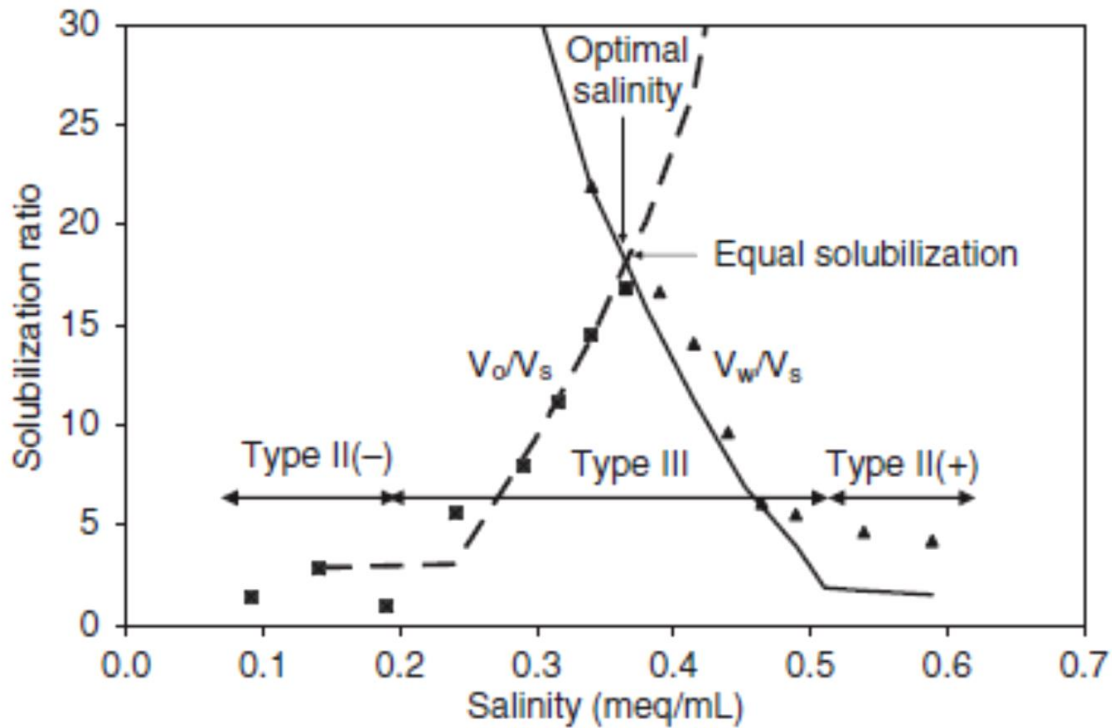
Gary Pope-EOR



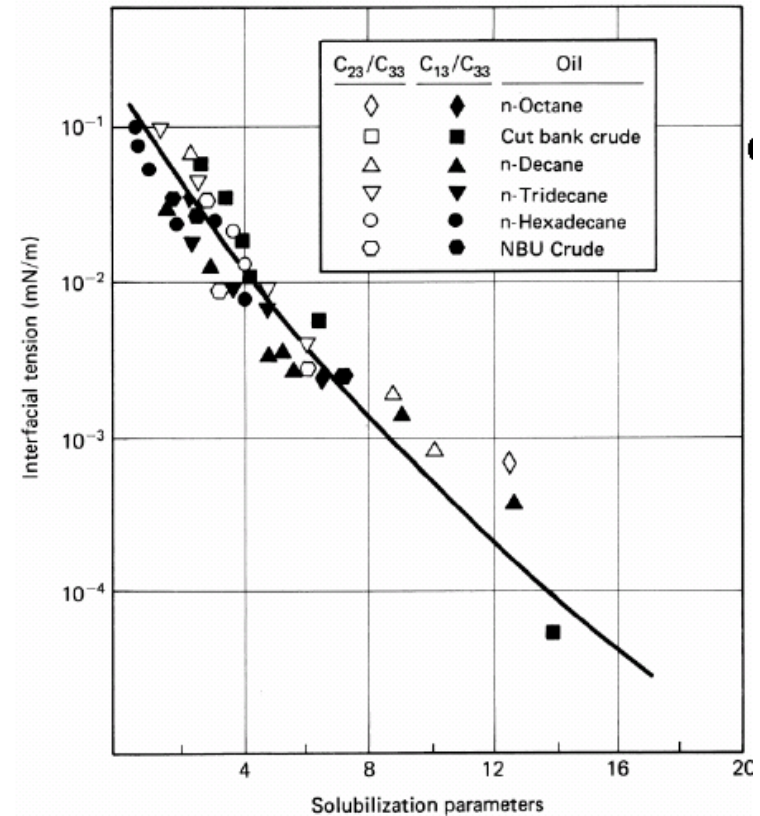
COMPORTAMIENTOS DE FASES



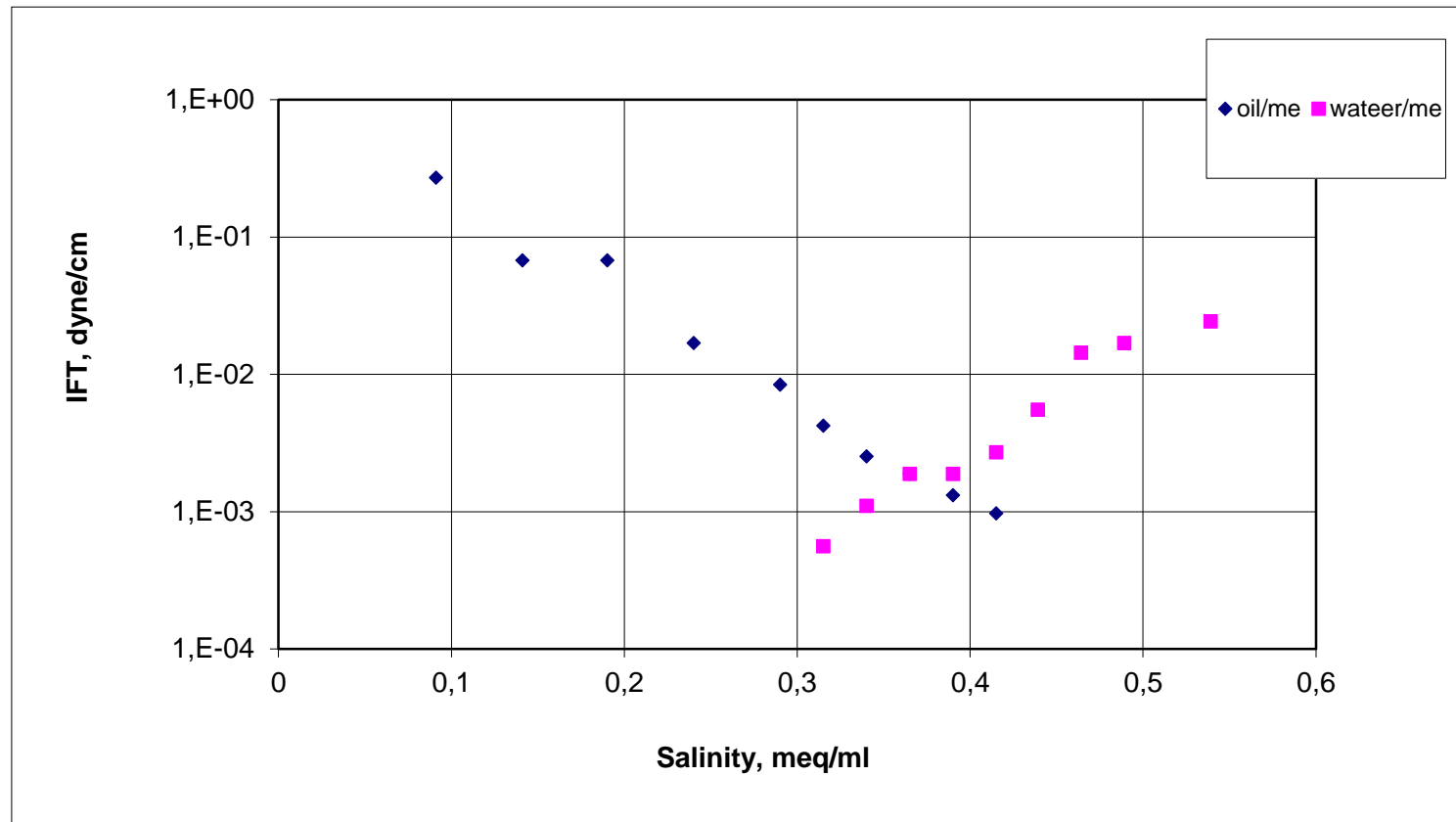
RELACIÓN DE SOLUBILIDADES



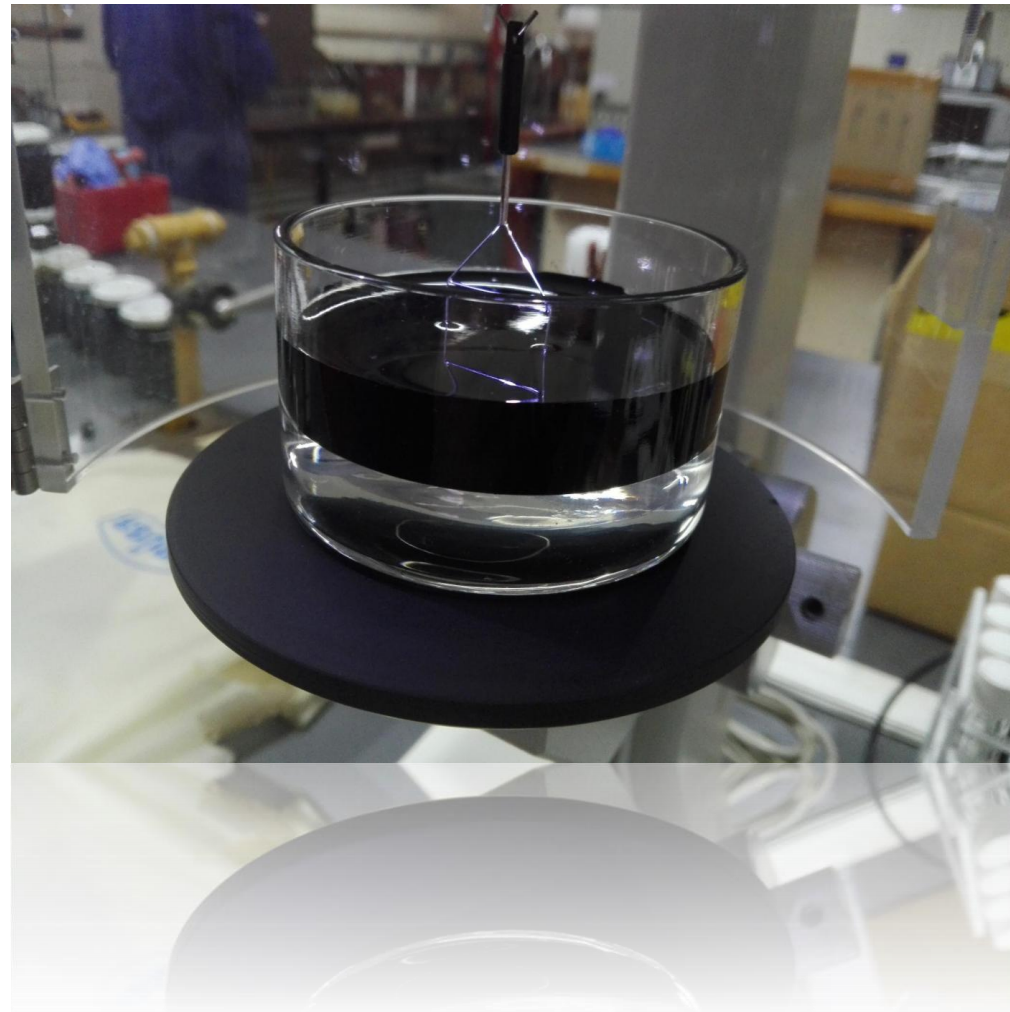
$$\gamma = \frac{C}{\sigma^2}$$



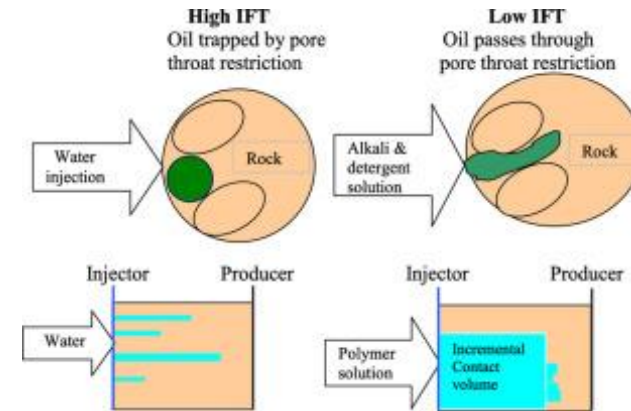
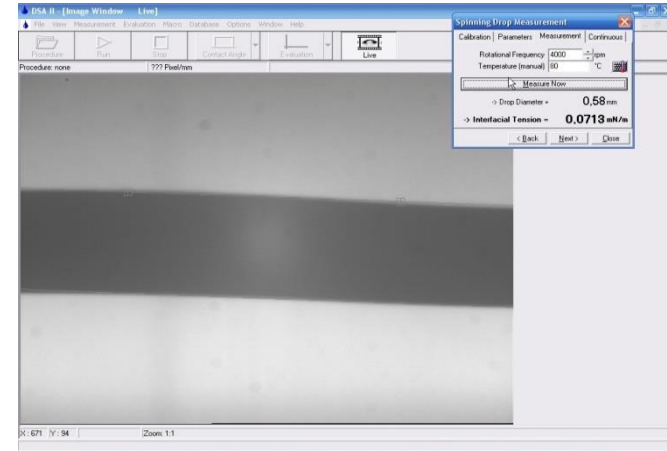
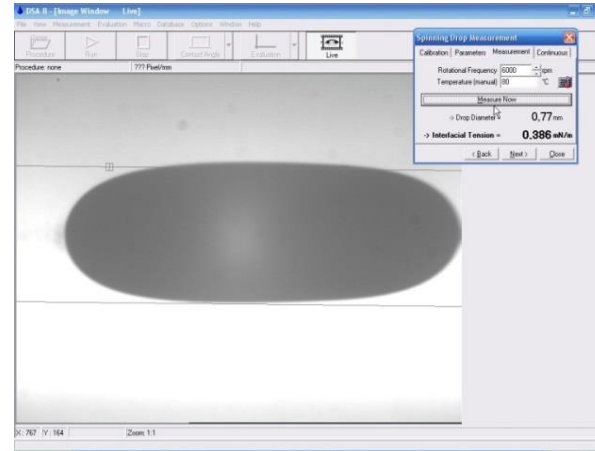
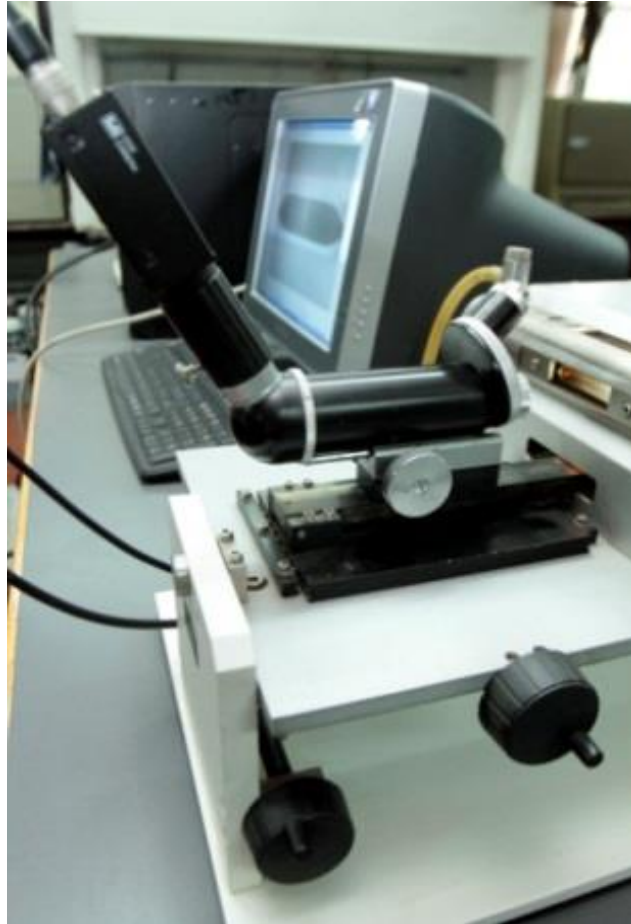
IFT VS SALINIDAD



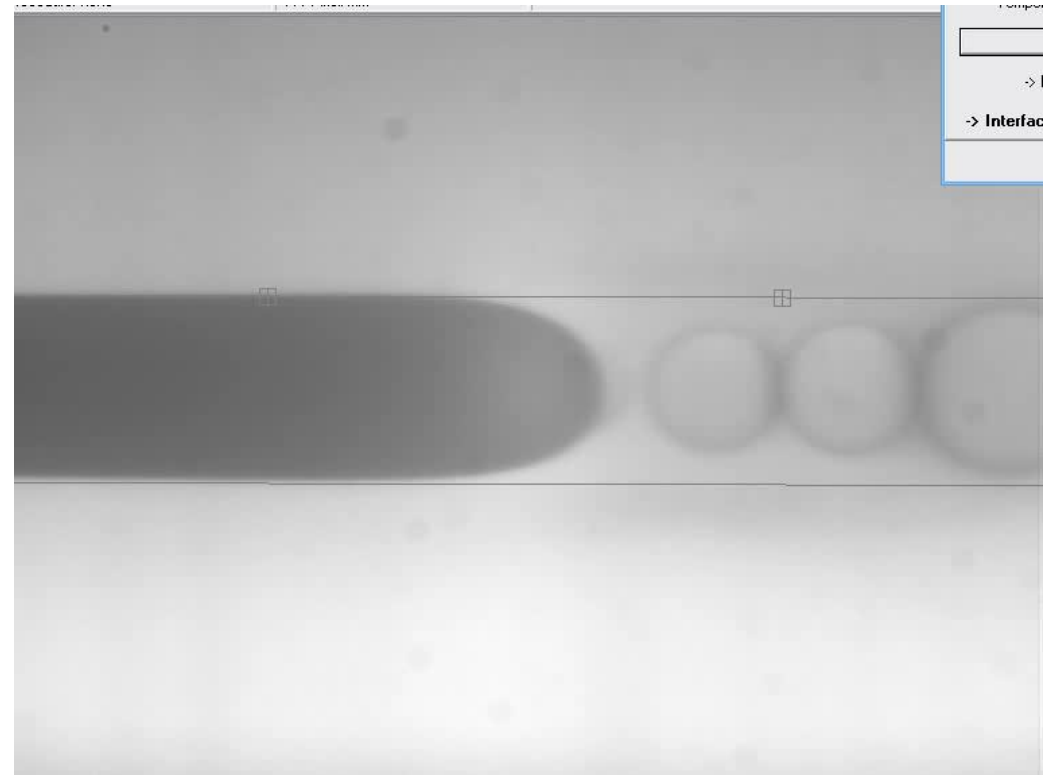
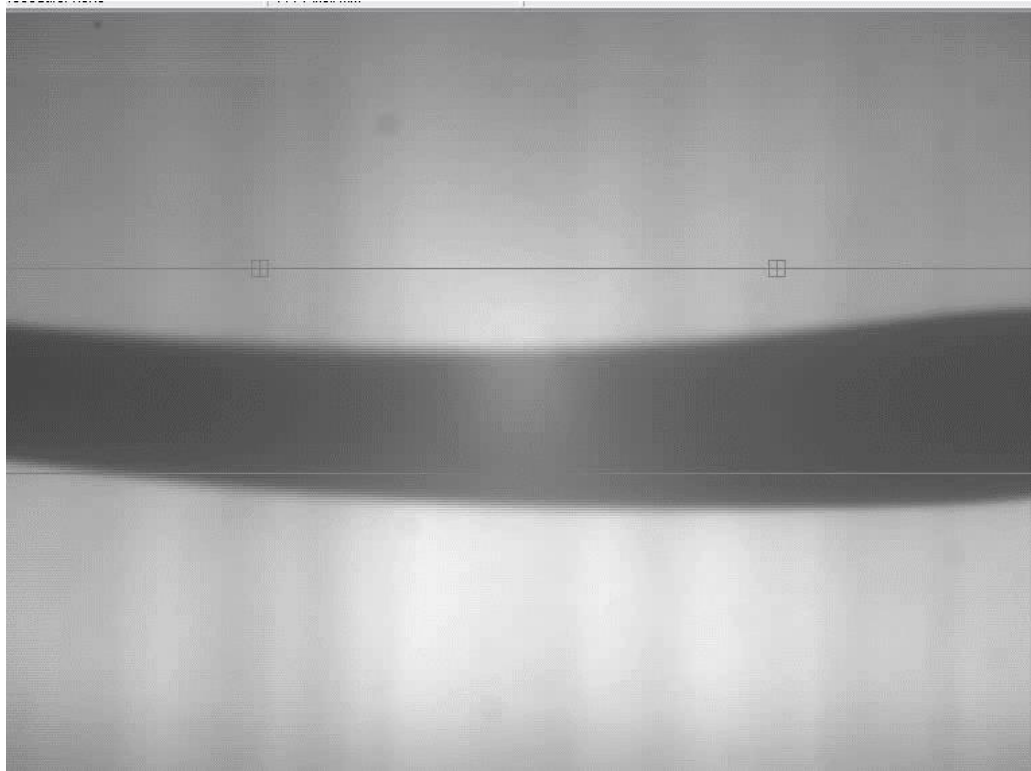
IFT W/O



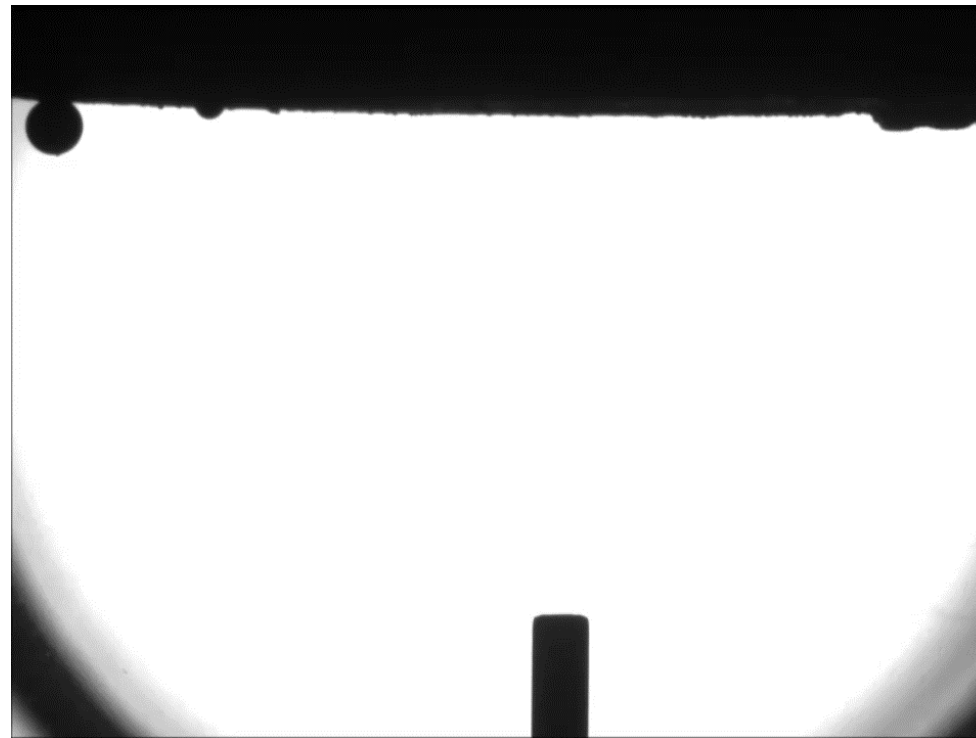
IFT-EOR



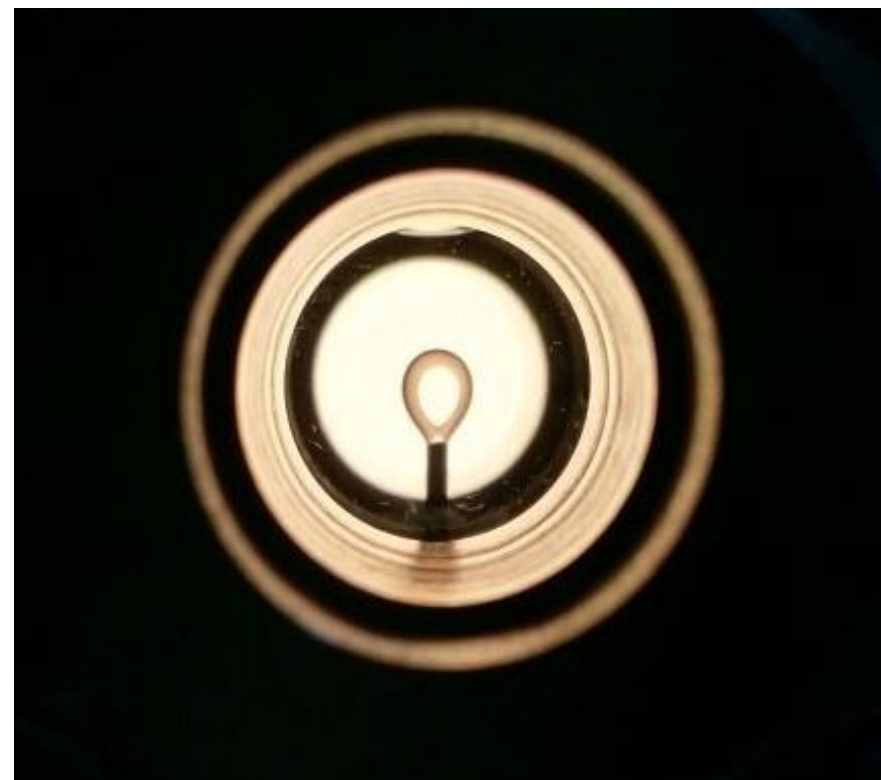
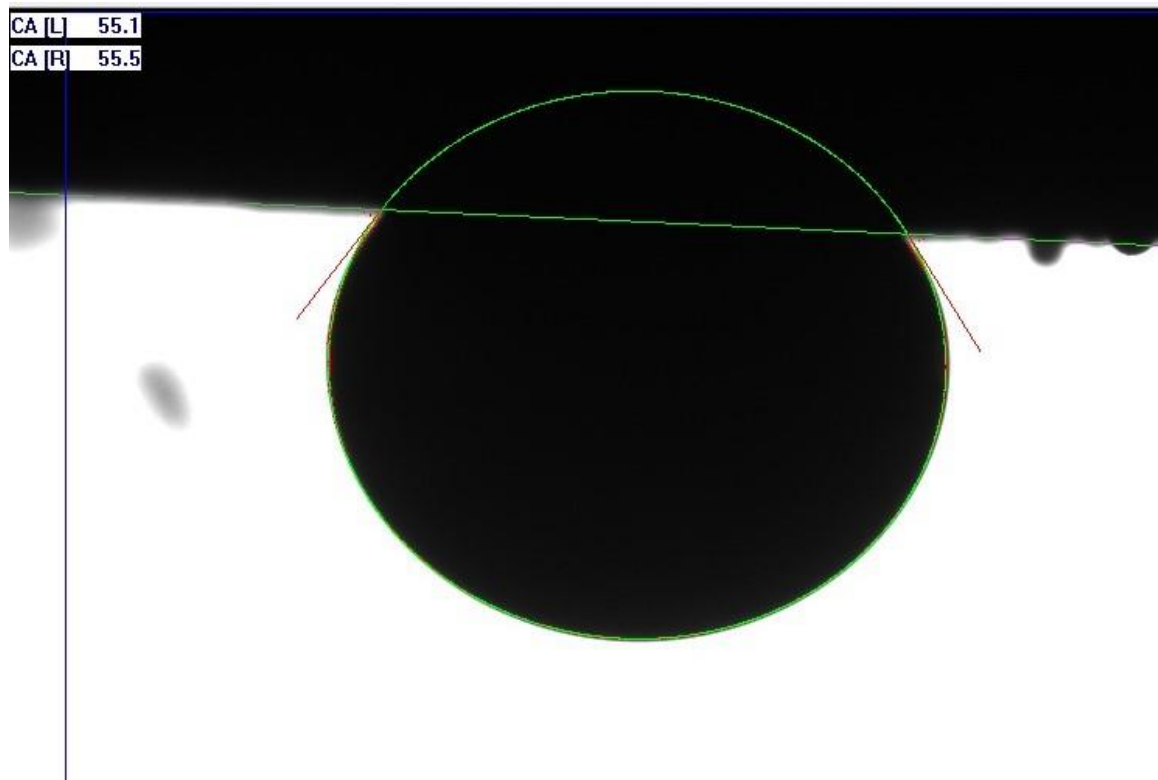
IFT-EOR



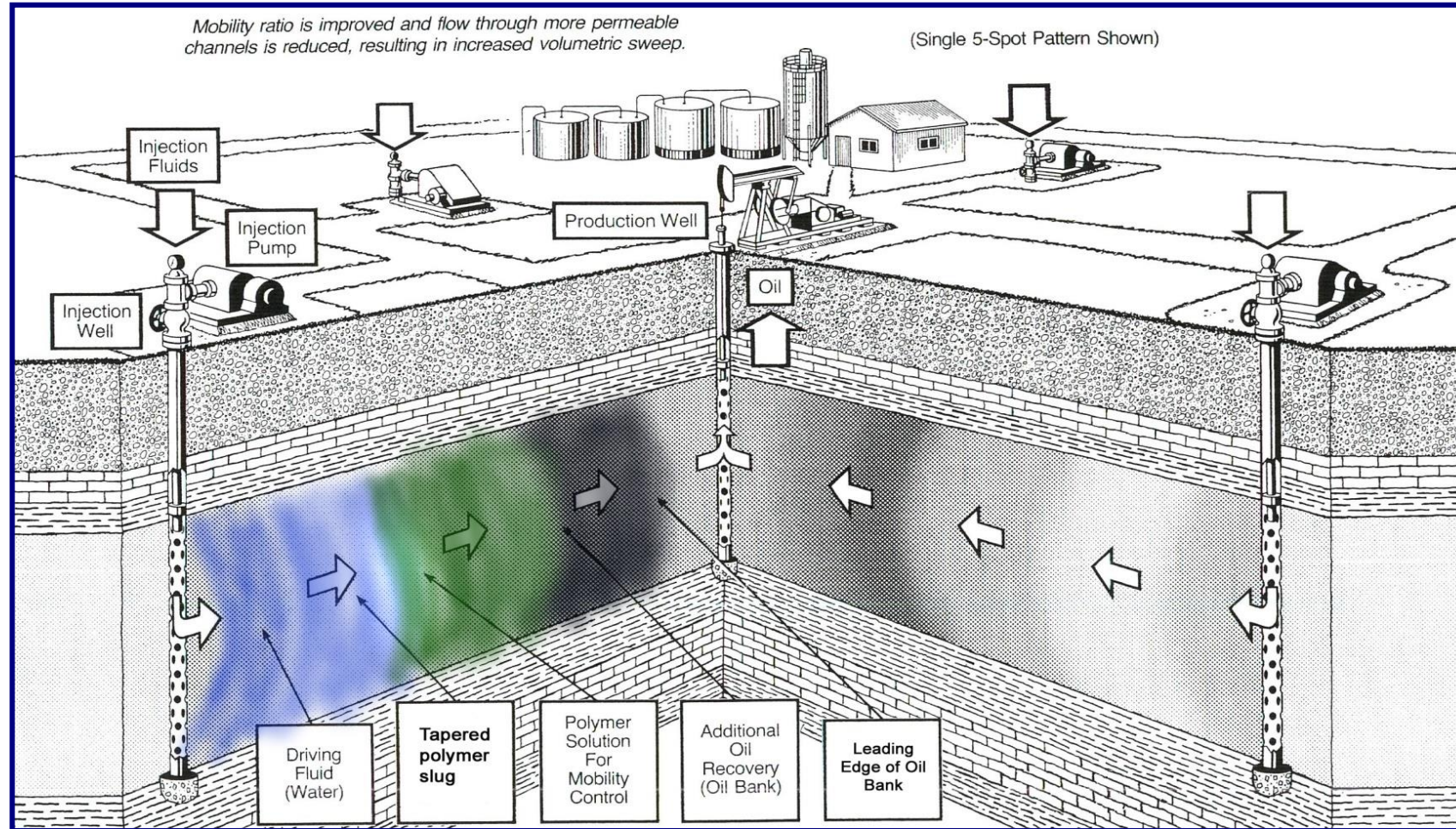
ÁNGULOS DE CONTACTO



ÁNGULOS DE CONTACTO-IFT



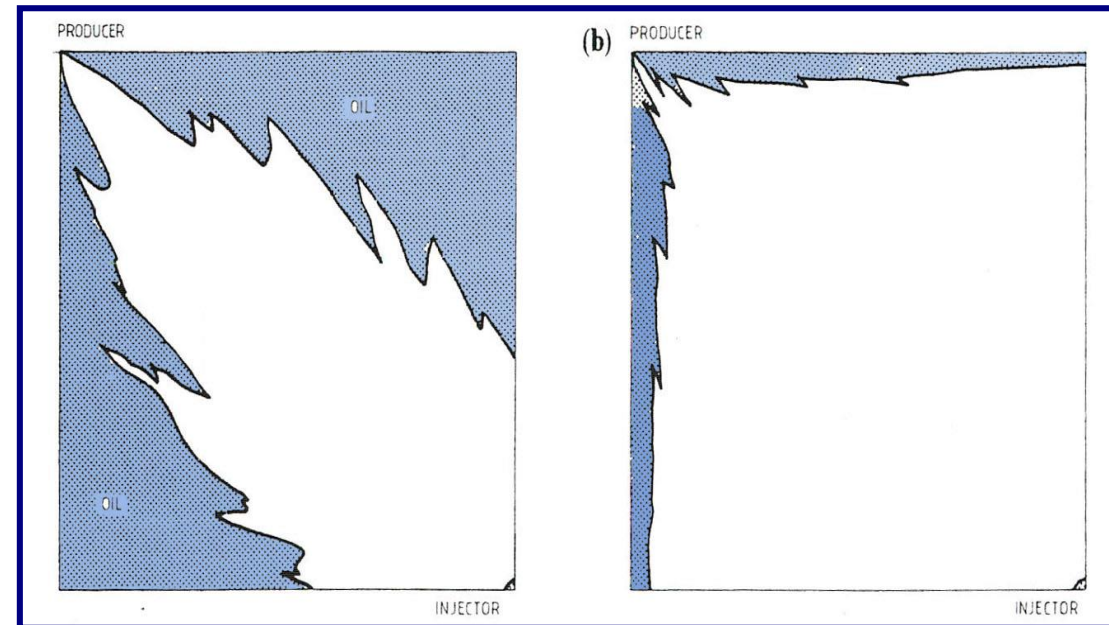
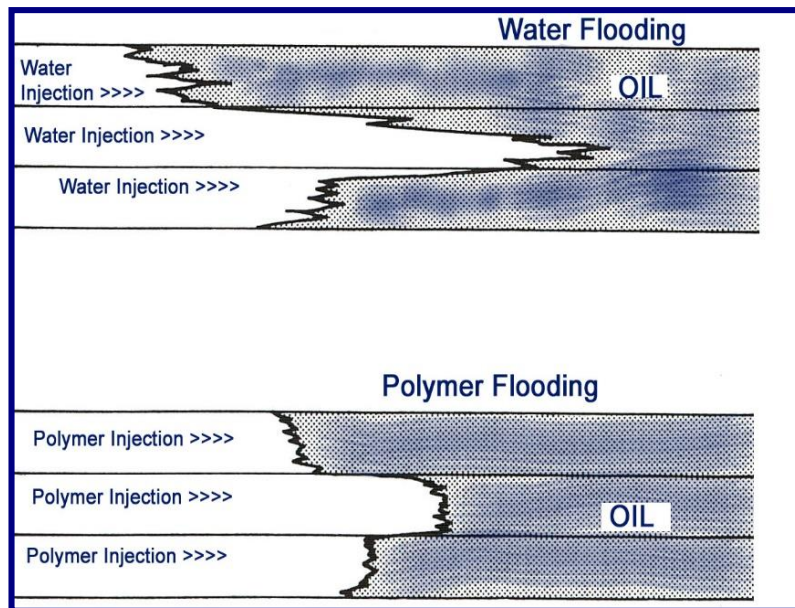
POLÍMEROS



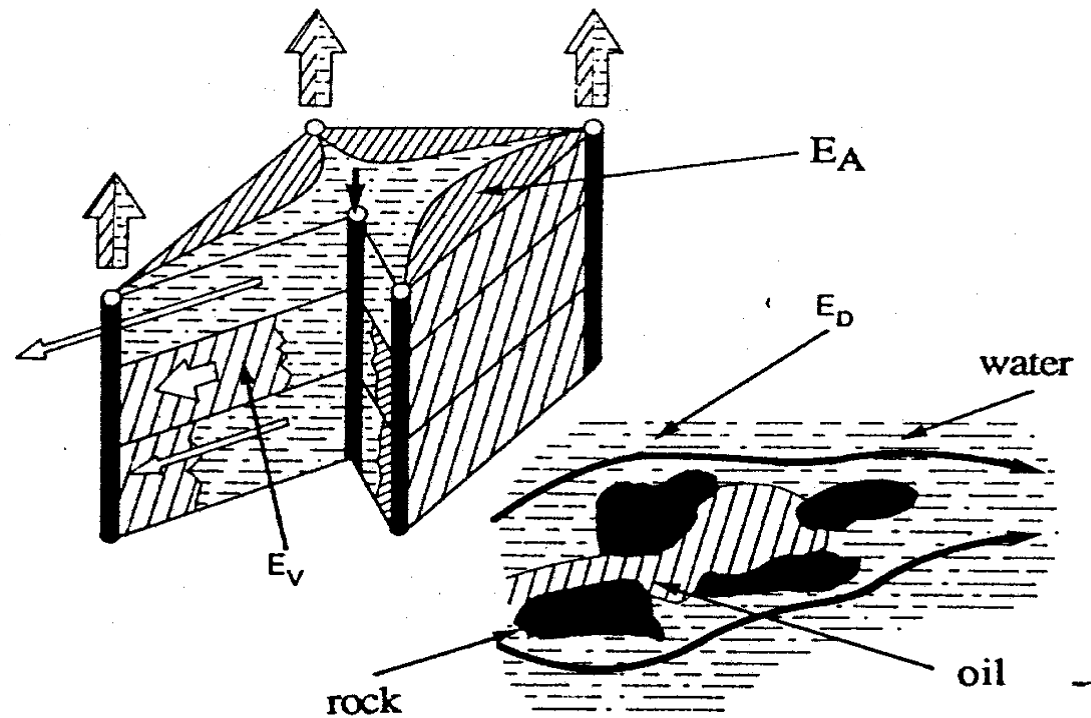
RELACIÓN DE MOVILIDADES

$$M = \frac{\lambda_w}{\lambda_o} = \frac{k_w / \mu_w}{k_o / \mu_o} = \frac{k_w \mu_o}{k_o \mu_w}$$

$$E_v = E_a \times E_i$$



EFICIENCIAS



$$E_v = E_a \times E_i$$

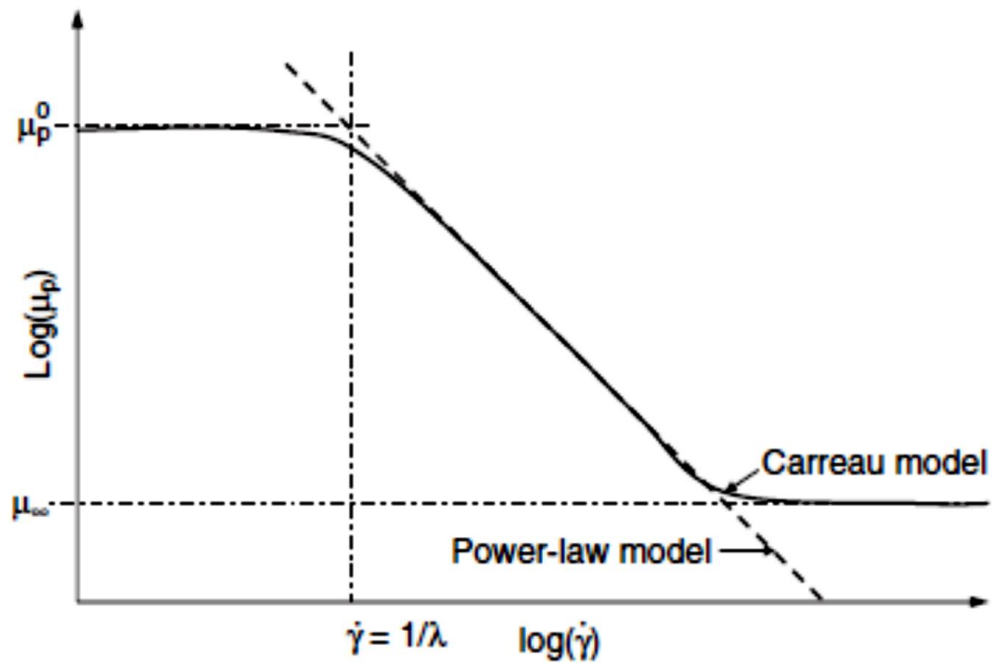
FACTOR DE FILTRADO

$$FR = \frac{t_{200} - t_{180}}{t_{80} - t_{60}}$$

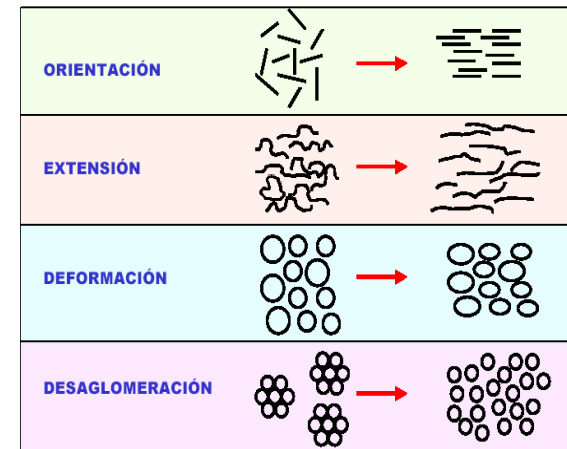
	NORMAS API	SPE 113845	SPE 116754	SNF
CONCENTRACIÓN	1000 ppm	1500 ppm	1500 ppm	1000 ppm
TIEMPO DE HIDRATACIÓN (HS) Y AGITACION	Toda la noche en reposo	18 hs de agitación	48 hs de agitación	1,5 hs de agitación
TIEMPOS DEL VOLUMEN DE FILTRADO	t ₁₀₀ , t ₂₀₀ , t ₄₀₀ , t ₅₀₀	t ₆₀ , t ₈₀ , t ₁₈₀ , t ₂₀₀	t ₂₀ , t ₄₀ , t ₈₀ , t ₁₀₀	t ₁₀₀ , t ₂₀₀ , t ₃₀₀
DIAMETRO DEL PORO DE LA MEMBRANA	1.2 micrones	1.2 micrones	1.2 micrones	5 micrones
PRESIÓN(psi)	20	15		30
GAS UTILIZADO	Nitrógeno	Argón		Nitrógeno
FACTOR DE FILTRADO ACEPTABLE		1,2	1,2	1,5



MODELO REOLÓGICO



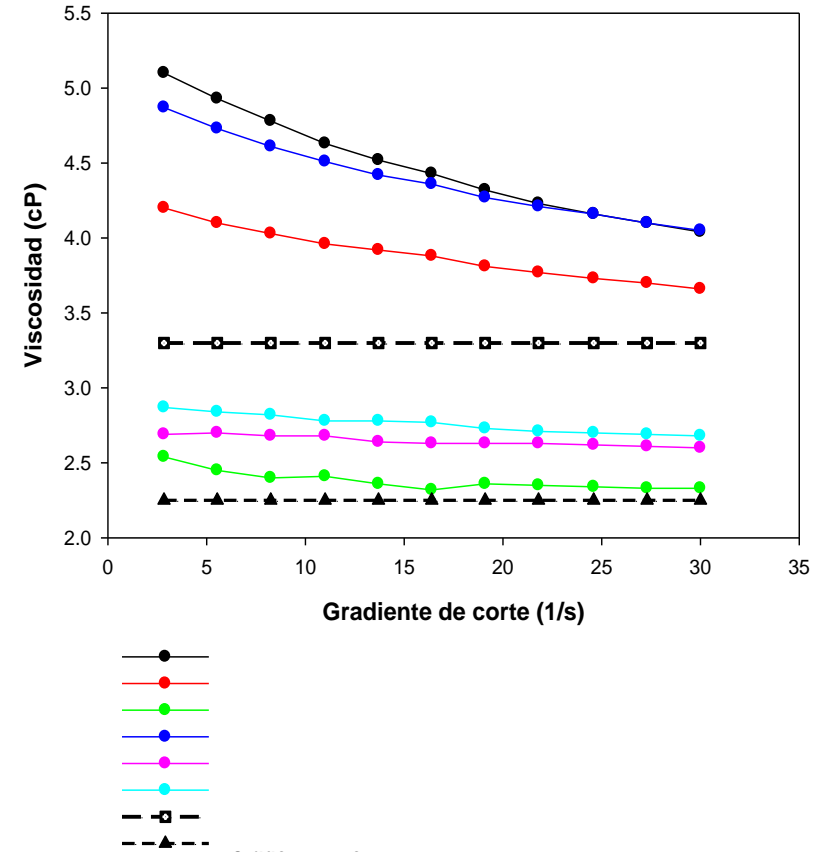
$$\dot{\gamma}_{eq} = \left(\frac{3n+1}{4n} \right) \alpha \frac{4u}{\sqrt{8k\phi}}$$



ENSAYOS REOLOGICOS

$$\dot{\gamma}_{eq} = \left(\frac{3n+1}{4n} \right) \alpha \frac{4u}{\sqrt{8k\varphi}}$$

Viscosidad en función del gradiente de corte
Gráfica comparativa 1000 ppm
T=56°C 30 días



ENSAYOS EN CELDA HS

