



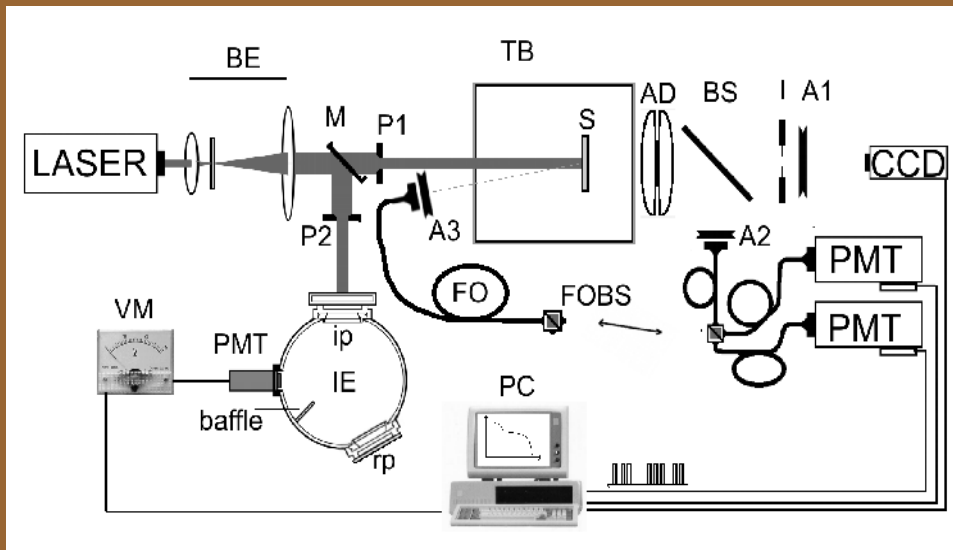
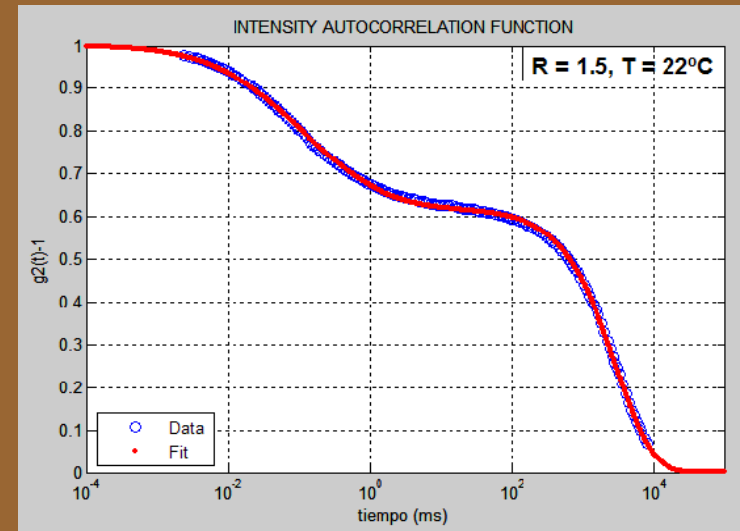
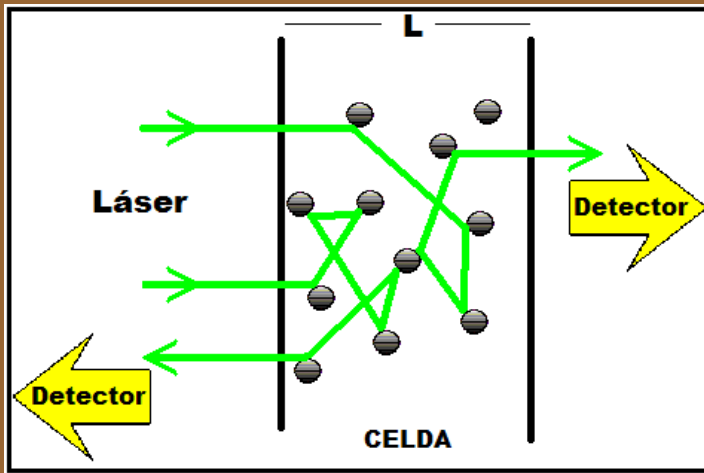
UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO  
INSTITUTO DE FISICA

# Dynamics and microrheology of slow relaxing systems by Diffusing Wave Spectroscopy

Julian M. Galvan-Miyoshi

Advisor: Dr. R. Castillo

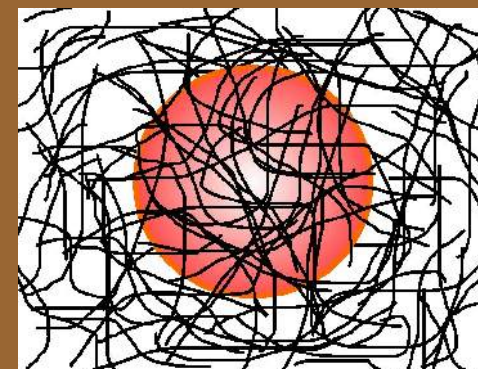
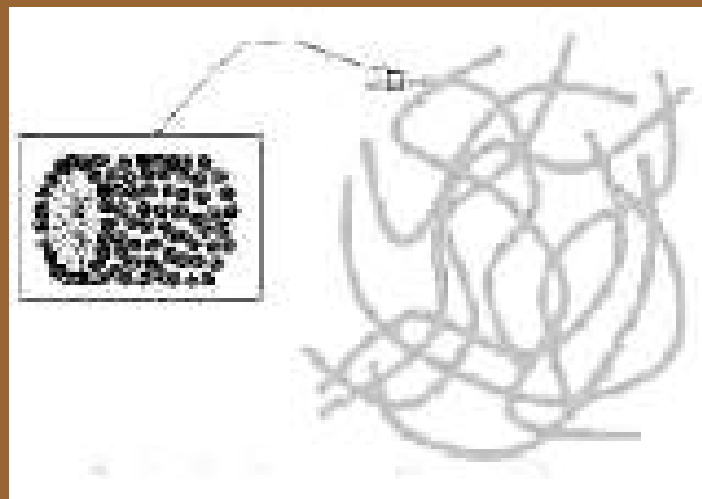
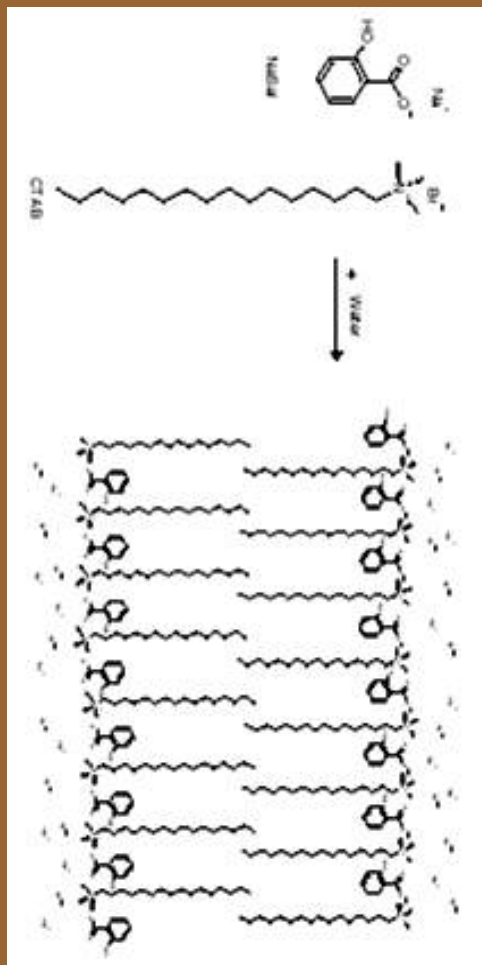
# DIFFUSING WAVE SPECTROSCOPY



$$\left[ \frac{\langle E(0)E^*(t) \rangle_E}{\langle |E(0)|^2 \rangle_E} \right]^2 \equiv |g_{(1)}(t)|^2 = \frac{1}{\beta} [g_{(2)}(t) - 1] = \frac{1}{\beta} \left[ \frac{\langle I(0)I(t) \rangle_T}{\langle I(0) \rangle_T^2} - 1 \right]$$

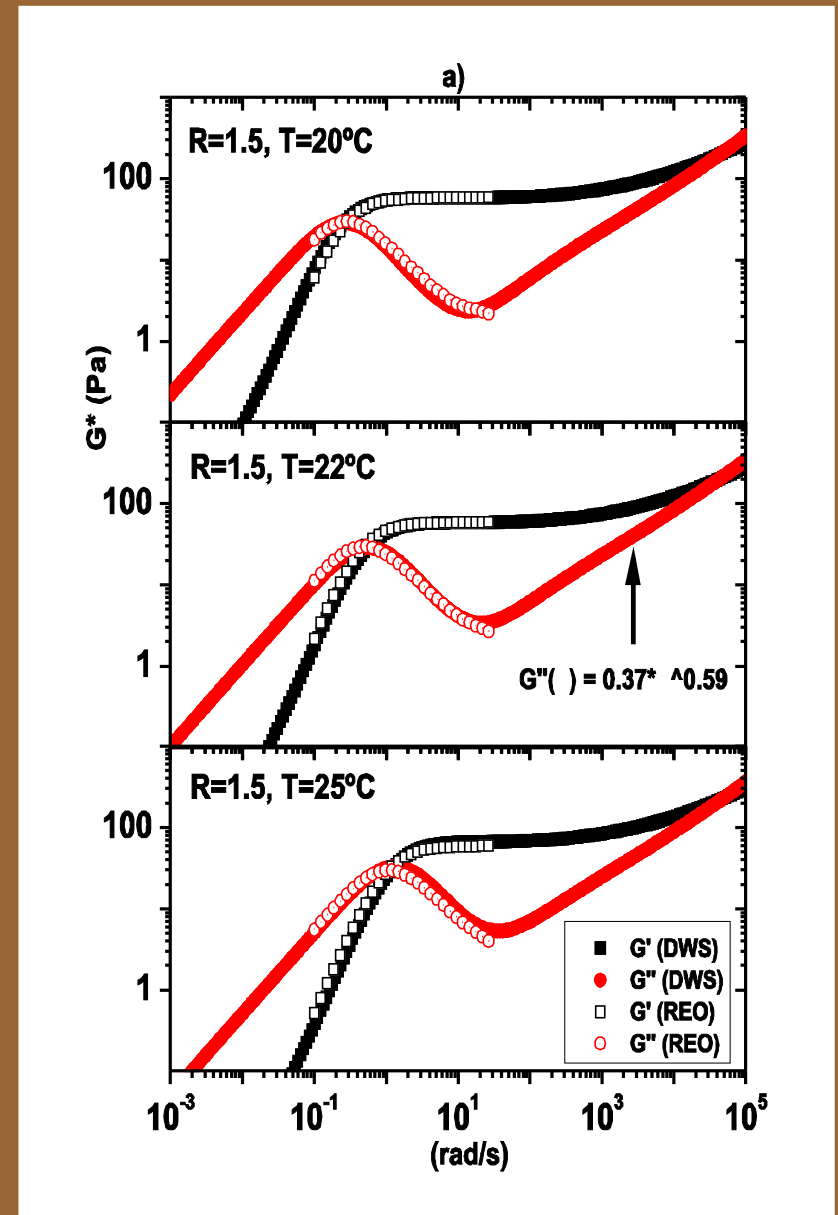
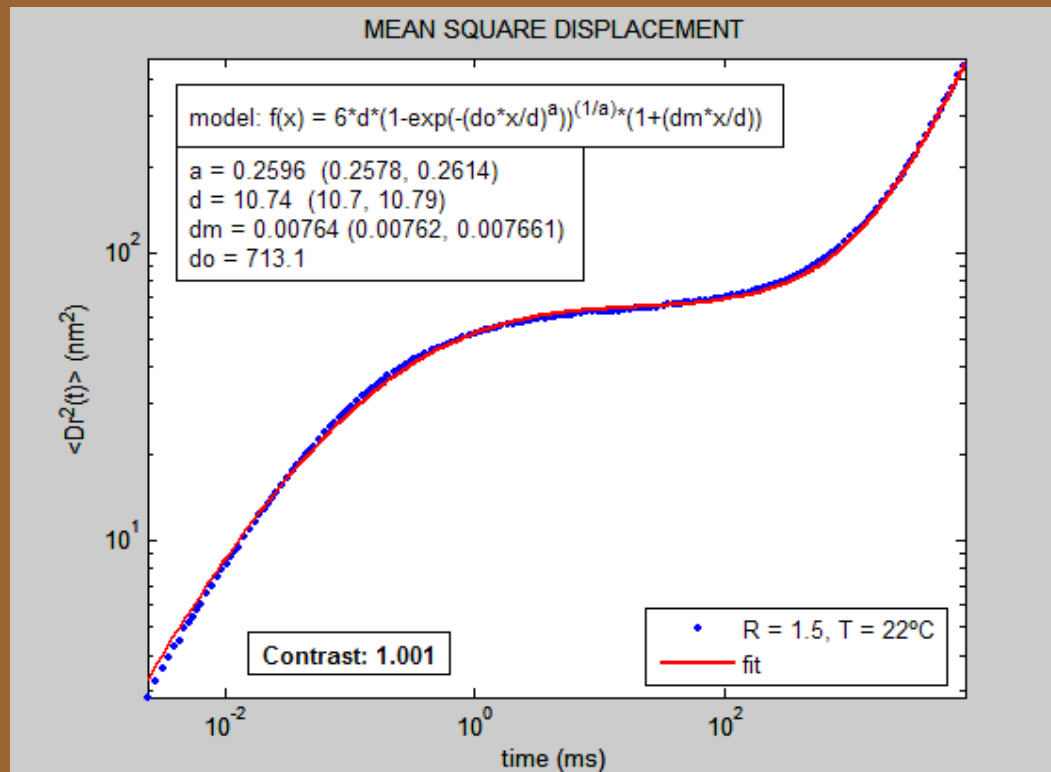
$$g_{(1)}(t) = \int_0^\infty P(s) \exp \left\{ - \frac{k_o^2 \langle \Delta r^2(t) \rangle}{3} \frac{s}{l^*} \right\} ds$$

# WORM-LIKE MICELLES

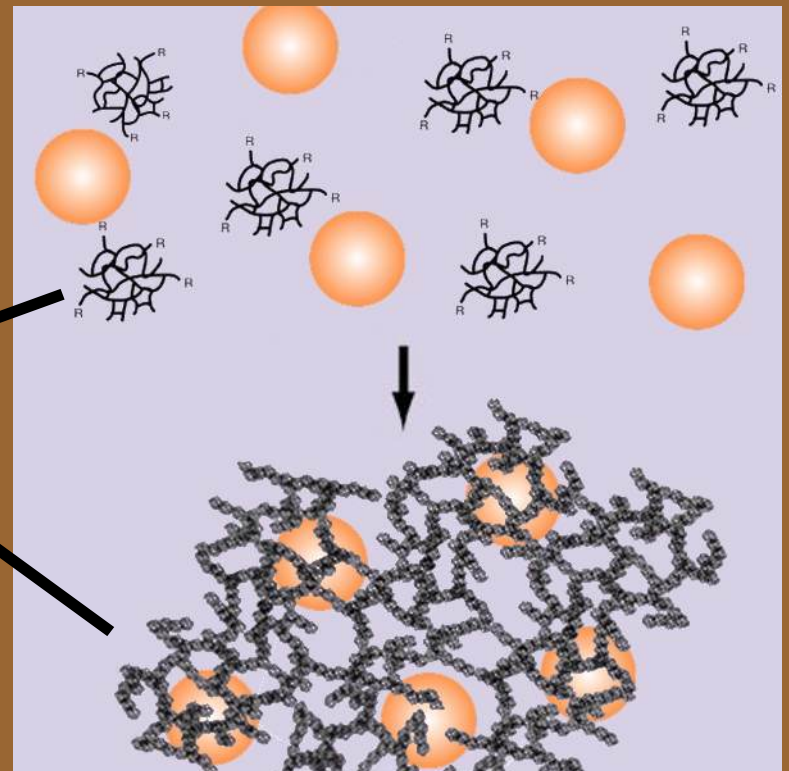
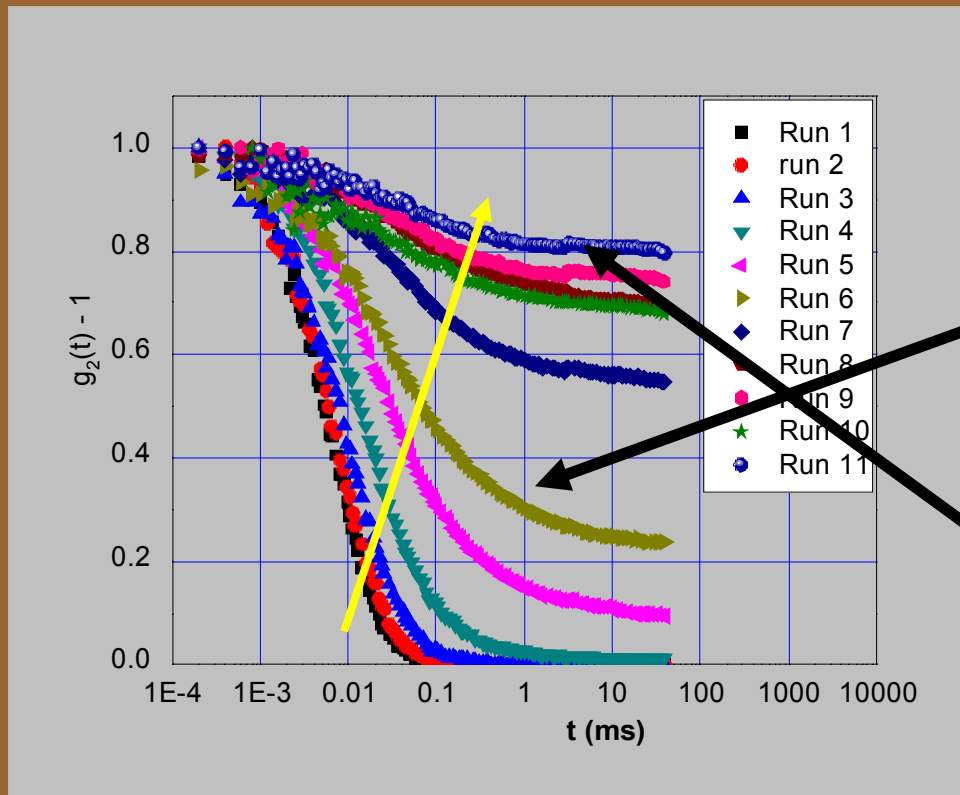


# WORM-LIKE MICELLES

$$\tilde{G}(s) = s\tilde{\eta}(s) = \frac{s}{6\pi a} \left[ \frac{6k_B T}{s^2 \langle \Delta \tilde{r}^2(s) \rangle} - ms \right]$$



# GELATION PROCESS



# ACKNOWLEDGMENTS



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**THANKS!**

