Abstract Submitted
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DNA electrophoresis in Pluronic F127[1] SEUNGYONG YOU, DAVID VAN WINKLE, Center for Materials Research and Technology and Physics Department, Florida State University — Electrophoresis involves the separation of bio-molecules in a sieving medium by applying an electric field. DNA molecule fragments are separated in conventional gels and a several models have been successfully applied for understanding the separations. Recently, a pluronic gel was found to be an effective sieving medium for electrophoresis. However, the mobility of DNA in this gel cannot be described by the conventional theories. One reason is that Pluronic F127 is not a crosslinked gel, but a lattice of polymer micelles. The migration of single DNA molecules stained with various dye molecules was studied in slab gel electrophoresis by real-time fluorescence microscopy. Results for a variety of sizes will be presented.

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