

Abstract Submitted
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Carbon nanotubes and graphene: their growth in a low temperature chemical reaction¹ ELISABETH STREIN, Brigham Young University — The synthesis of carbon nanotubes and graphene sheets is typically done at temperatures between 500-2000 °C with chemical vapor deposition techniques. Our research concerns synthesis in a catalytic organometallic reaction that takes place at 110 °C. To determine the reaction mechanism, time lapsed samples of the reaction of iron bis (cyclooctatetraene) and dimethyl sulfoxide with dimethoxyethane were extensively studied with an AFM. Data is presented for the graphene sheets and for the growth of tubes in the reaction. Results from TEM and Raman data are discussed

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