

Abstract Submitted  
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**Dispersions of graphene sheets characterized by Raman spectroscopy** ANGELA HIGHT WALKER, IRENE CALIZO, GUANGJUN CHENG, XIAOMIN TU, NIST, JEFF SIMPSON, Towson University, MING ZHENG, NIST — Using expertise garnered on carbon nanotube separation, work is underway to demonstrate quality graphene dispersions and low defect sheets in the liquid phase. Several combinations of surfactants, solutions, starting graphite material, and separation protocols are being explored to determine the optimal chemical and physical environments. Raman spectroscopy is used as the quality indicator both for the numbers of layers and the defect density. Additional characterization with AFM and UV-Vis confirms our findings.

Angela Hight Walker  
NIST

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