

AFM/Raman-TERS Workshop
September 27, 2016
Northwestern University

**TERS characterization of 2D materials from
graphene to TMDCs**

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We report results of TERS characterization of graphene oxide and the 2D semiconductors, MoS₂ and WS₂. The gap mode TERS signal of these 2D materials becomes dramatically enhanced over wrinkles and creases, as well as over nanopatterns imprinted into flakes using a sharp diamond probe. The resonant Raman signal of MoS₂ contains additional peaks normally forbidden by selection rules. TERS maps of few-layer-flakes of this 2D semiconductor show that the spatial distribution of Raman intensity across the flake varies for different peaks, providing interesting insights into the structure of such 2D semiconductors with 10-20 nm spatial resolution.