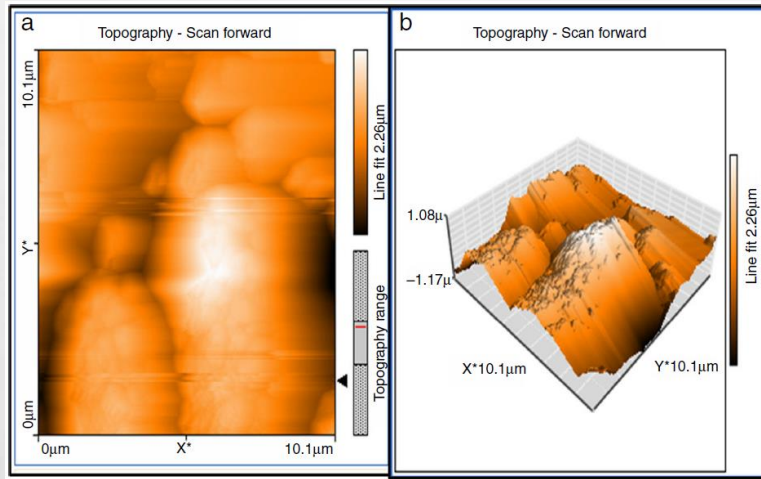


# SYNTHESIS OF MANGANESE SULFIDE (MNS) THIN FILMS BY CHEMICAL BATH DEPOSITION AND THEIR CHARACTERIZATION



A) Scan 2D  
B) Scan 3D

- \* Deposition by CBD (Chemical Bath Deposition) on a glass.
- \* Film thickness around 170 nanometers.
- \* Made with Nanosurf Easy Scan 2.
- \* The 2D AFM image shows spherical grains getting coalescences between them.
- \* The 3D image shows mountainous like structure. The mountains have extended characteristic with planar crest having deep valleys.

“Chaki, S. H., Chauhan, S. M., Tailor, J. P., & Deshpande, M. P. (2017). Synthesis of manganese sulfide (MnS) thin films by chemical bath deposition and their characterization. *Journal of Materials Research and Technology*, 6(2), 123-128.”