The bending process of 2D materials, subject to an external force, is investigated, and applied to graphene, molybdenum disulphide (MoS₂), and aluminosilicate nanotubes (imogolite). For graphene we obtained 3.4 eV A² per atom for the bending modulus, which is in good agreement with the literature. We found that MoS₂ is ~11 times harder to bend than graphene, and has a bandgap variation of ~1 eV as a function of curvature. Finally, we also used this strategy to study aluminosilicate nanotubes (imogolite) which, in contrast to graphene and MoS₂, present an energy minimum for a finite curvature radius. Roof tile shaped imogolite precursors turn out to be stable, and thus are expected to be created during imogolite synthesis, as predicted to occur by self-assembly theory.

**Keywords:** Graphene, Imogolite, Molecular Dynamics

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