Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supplementary Information: Bending Energy of 2D Materials: Graphene, MoS_2 and Imogolite

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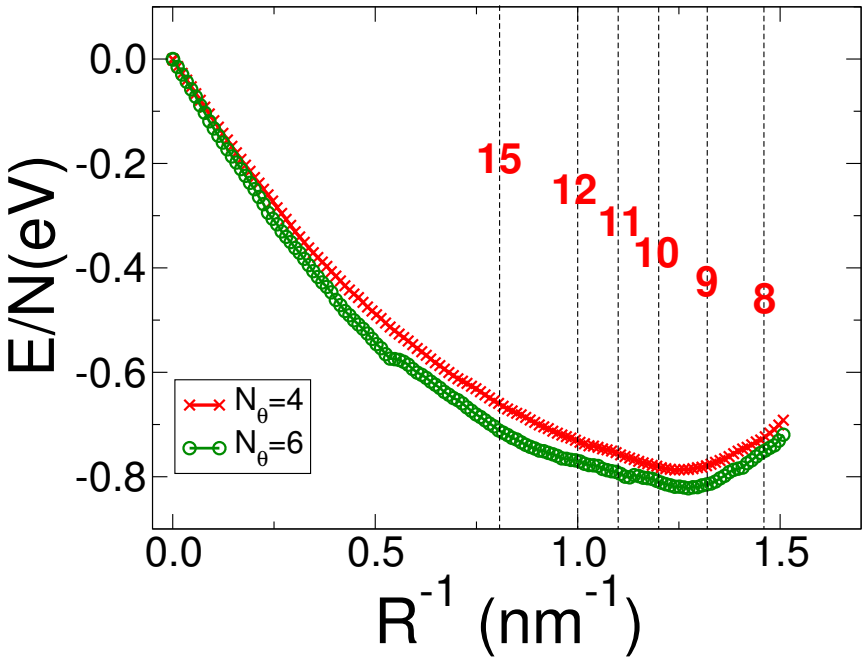

Figure S1: Energy vs. curvature of imogolite sheets with $N_\theta = 4$ and 6. For both cases the minimum of the bending energy occurs for $9 < N_\theta < 10$. The dashed vertical lines, and the numbers that label them, correspond to the curvature radius of a completely closed nanotube with that N_θ value. Green Al; red O; yellow Si; and light gray H.

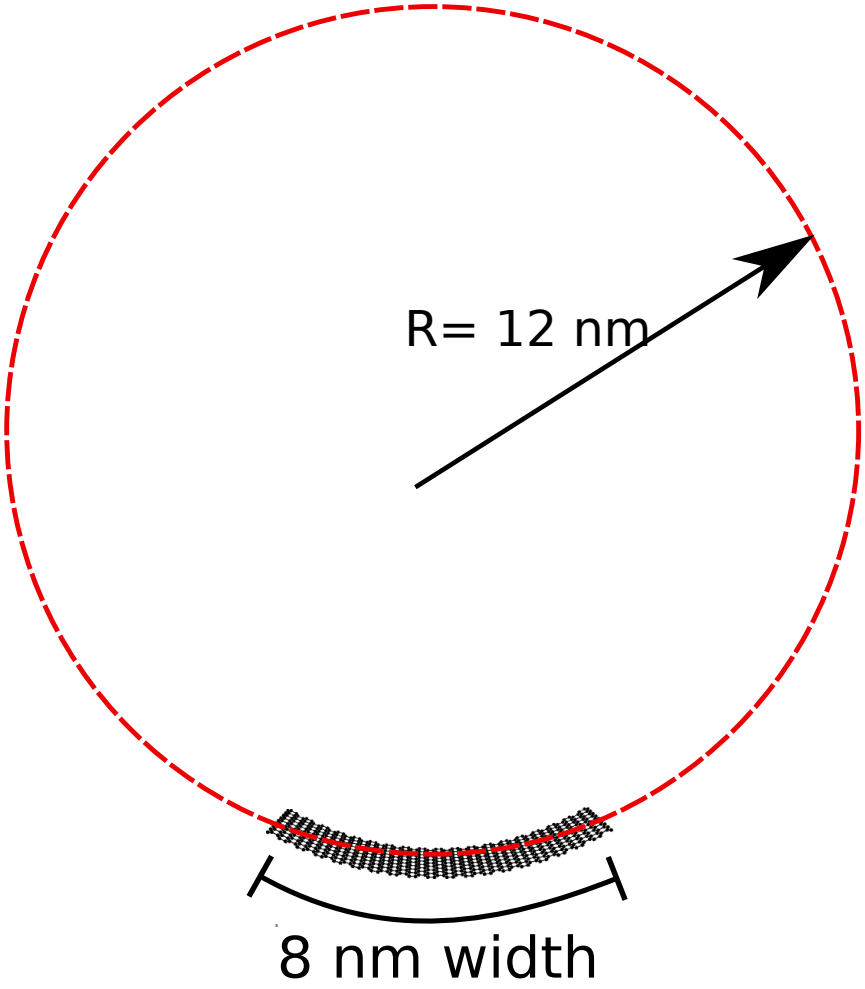

Figure S2: Illustration of the bending process: the external force has a curvature radii of 12 nm and is applied to a graphene ribbon 8 nm wide.