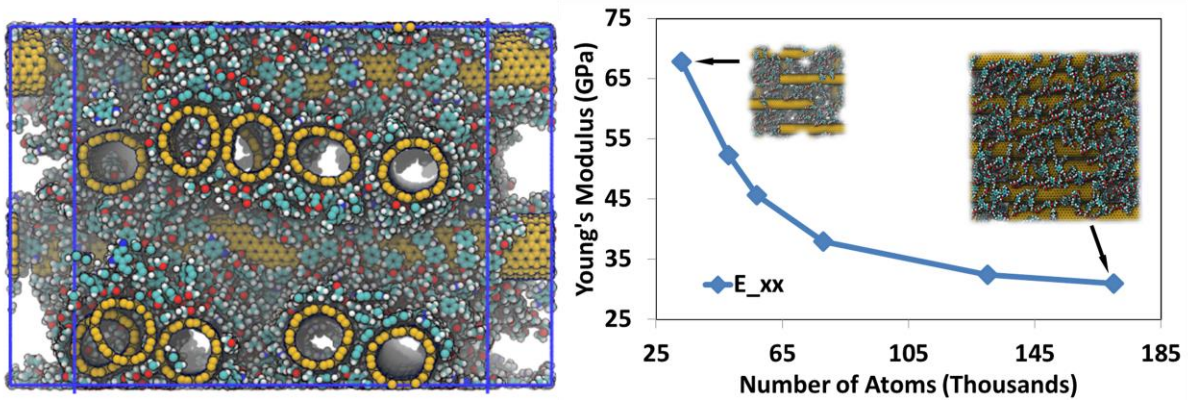# Mechanical Property Evaluation of Buckypaper/Epoxy Composites Using Molecular Dynamics Simulations Fully Implemented on Graphical Processing Units

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Model Type	Young Modulus (GPa)			Poisson ratio		
	E_{xx}	E_{yy}	E_{zz}	ν_{xx}	ν_{yy}	ν_{zz}
Short CNTs	32.4	10.4	33.7	-0.023	0.12	-0.021
Short CNTs Experiment [27] and Present study	2-22	-	-	-	-	-
Long CNTs	176.7	12.3	148.4	-0.067	0.17	-0.073
Long CNTs Experiment [28]	163	-	-	-	-	-

Young's modulus and Possin's ratio of buckypaper/epoxy composite is calculated in different directions using a general GPU based molecular dynamic code developed in CUDA-C