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## Synthesis, thermophysical characterization and thermal performance analysis of novel Cu-MXene hybrid nanofluids for efficient coolant applications

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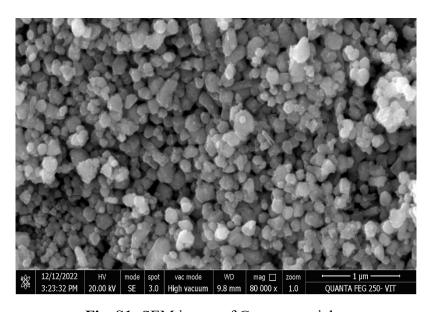
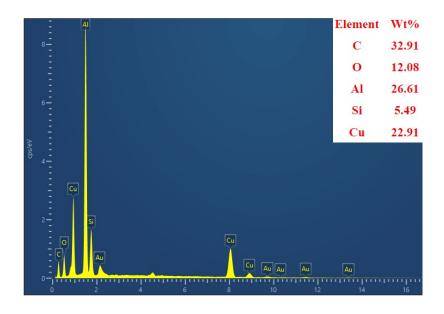


Fig. S1: SEM image of Cu nanoparticles



**Fig. S2:** EDX image of Cu nanoparticles. Inset of the figure represents elemental composition (wt.%) in table form.

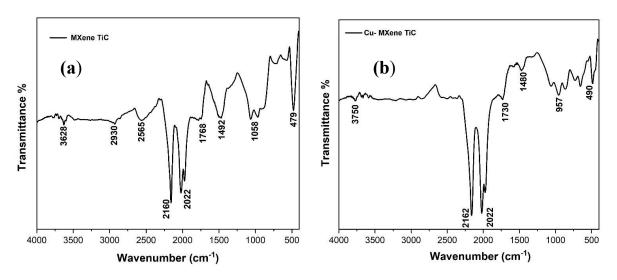


Fig. S3: FTIR spectra of (a) MXene and (b) Cu-MXene nanostructures