

Abstract Submitted
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Raman Spectroscopy of Carbon Nanotubes¹

RICHARD BERGSTROM JR., ERNST KNOESEL, Rowan University — Raman spectroscopy is an optical technique used to analyze vibrational modes in materials. Raman is used in carbon nanotubes for the study of phonon modes which produce the vibrations. There are two principle bands of phonons in carbon nanotubes, the G-mode and the Breathing mode. Through the examination of the Breathing mode phonons we can determine the nanotube type and size. By studying the relationship between the two phonon modes we would like to gain insight into the conductivity and the heat transfer between nanotubes.

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