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**Introducing Raman Spectroscopy of Crystalline Solids in the Undergraduate Curriculum** BAHRAM ROUGHANI, Kettering University, DAVID WARNER, UMA RAMABADRAN, Kettering University — We describe an experiment designed as an upper level physics laboratory that introduces students to Raman Scattering of electronic materials and research methodology. This experiment is an effective approach in demonstrating the relationship between the Raman intensity of the scattered light from crystals and symmetry dependent Raman selection rules. In our measurements we alter the angle between the crystal axis and the polarization of the incident laser beam by sample rotation. The three dimensional plot of the intensity profile versus the theoretical model is used to distinguish between various crystal plans of the same electronic material. This experiment combines knowledge regarding properties of materials with optical characterization. It is suitable as an upper level physics laboratory or for introducing new graduate student to use Raman spectroscopy as a research tool.

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