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## Characterization of Natural Polymeric Fibres with Resonance Acoustic Spectroscopy

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Natural polymers are now being considered for composite materials because of their biodegradability in comparison to synthetic polymers. Hence much of scientific research is directed toward unleashing unknown and technologically applicable properties of these organically derived materials. Resonance acoustic spectroscopy uses sound waves as a probing medium to trigger vibrations of an elastic object. In this project, the resonance acoustic spectrometer was designed and constructed using portable radio speakers, a signal generator and a spectrum analyser. Natural polymeric fibres, disposed of as solid waste from the industrial extraction process of organic oils from rosehip (*Rosa Canina*), were then characterized for size, shape and composition. The preliminary results show some promising behaviour and more probing is currently underway.

**Apply to be considered for a student ; award (Yes / No)?**

No

**Level for award;(Hons, MSc, PhD, N/A)?**

N/A

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