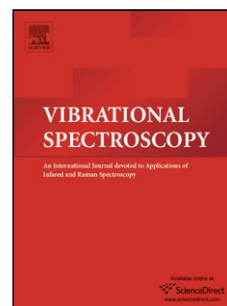


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**Review of FTIR microspectroscopy applications to investigate biochemical changes in *C. elegans***

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**Abstract**

*Caenorhabditis elegans* nematode has emerged as a model organism paving the ways for multidisciplinary research in biomedical, environmental toxicology, aging, metabolism, obesity, and drug discovery. The wide range of applications of this model organism are attributed to *C. elegans*' unique features: *C. elegans* are inexpensive, easy to grow and maintain in a laboratory, has a short lifespan, and has a small body size. With this increased interest, the need for analytical techniques to assess the biochemical information on intact worms continues to grow. Fourier Transform Infrared (FTIR) microspectroscopy is considered a powerful technique that can be used to determine the chemical structure and composition of various materials, including biological

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