

Methods related to Real-Time Cancer Diagnostics at Endoscopy Utilizing Fiber-Optic Raman Spectroscopy

ABSTRACT

A method of achieving instrument independent measurements for quantitative analysis of fiber-optic Raman spectroscopy system, the system comprising a laser source, a spectroscopy and a fiber optic probe to transmit light from the laser source to a target and return scattered light to the spectroscopy, the method comprising transmitting light from the laser source to a standard target having a known spectrum, recording a calibration spectrum of the scattered light from the standard target, comparing the known spectrum and the calibration system and generating a probe and/or probe-system transfer function, and storing the transfer function. Further provided is a method of performing real-time diagnostic Raman spectroscopy optionally in combination with the other disclosed methods.

(Fig. 1)