



Calculus Analysis

Fourier transform infrared spectroscopy (FTIR):
An accurate, reliable quantitative &
qualitative method of stone analysis.

**Gives a CLUE to the pathogenesis
of the underlying disease**

Advantages of Calculus Analysis by FT-IR

- The study of chemical composition of renal stones is important for understanding their etiology, therapy, proper management of the disease and the prevention of its recurrence
- Because most stones are multicomponent, the analysis method should be capable of resolving all the components of the stone. FTIR gives an analysis of the **core as well as composition of the various layers of the calculus**
- A **quantitative determination** of the proportion of various materials in calculi is also possible
- Chemical methods are comparatively erroneous due to occasional false-positive and false-negative results