

### **multiplex spectrometer**

A *spectrometer* in which a single photodetector simultaneously receives signals from different spectral bands which are specifically encoded. In the case of frequency multiplexing, each spectral band is modulated at a specific frequency. Decoding is achieved by filtering out, by electronic means, the corresponding signals.

Frequency multiplexing may be realized by changing the path difference between the two interfering beams at a uniform rate. Fourier transform of the interferogram so obtained yields the spectrum. This method is called *Fourier transform spectrometry (FTS)*.

1995, 67, 1729