

## FT-IR原理

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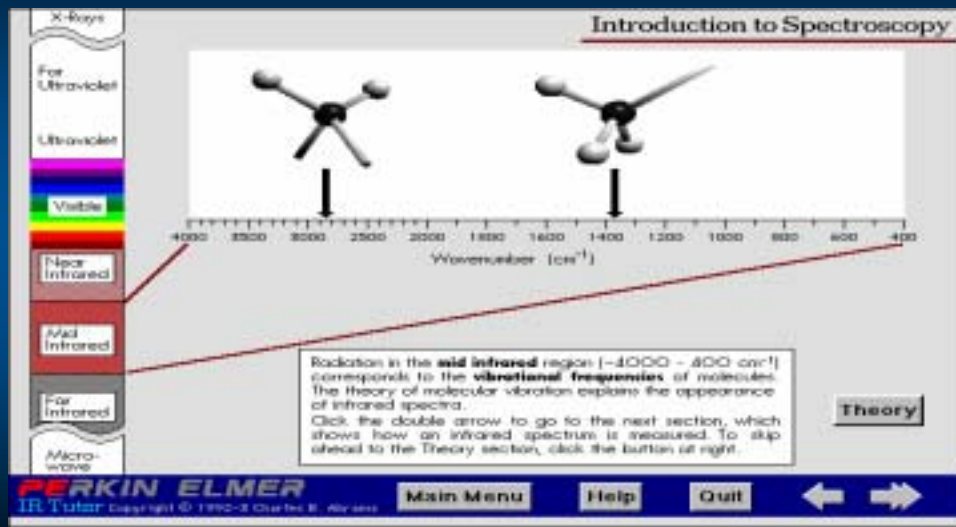
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### What is a FTIR

- 利用干涉光譜做傅利葉轉換(  $FT(t)$  )，得到有機光譜
  - 應用：利用有機物振動光譜得到官能基(function group) 及指紋區(fingerprint)光譜，做定性及定量分析

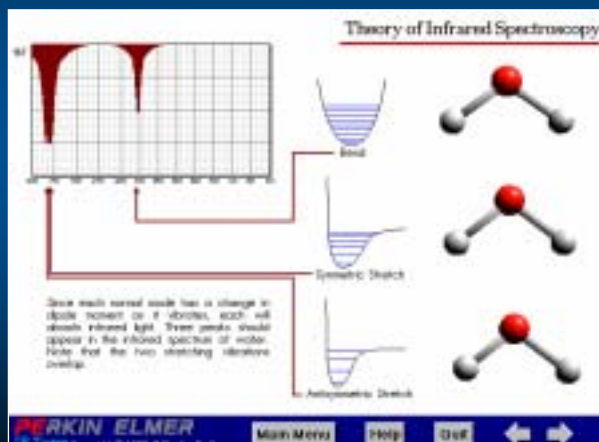


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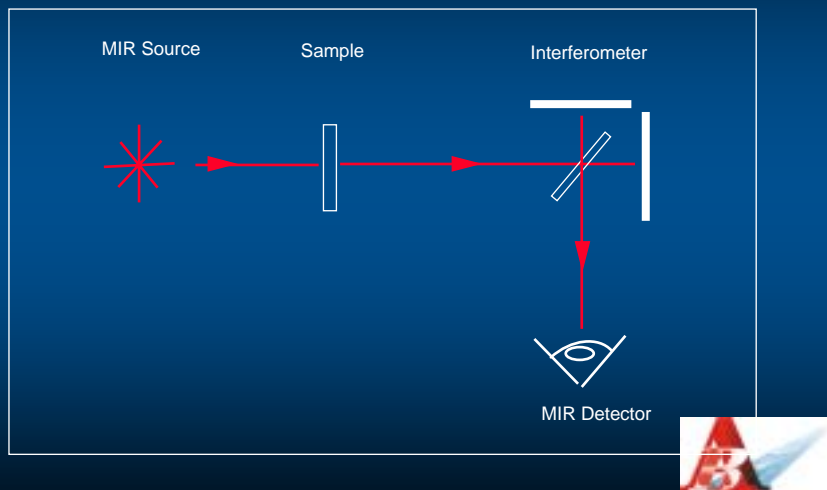


## IR 的原理

IR 的原理是看分子的振動時吸收光譜,不同的分子振動有不同的吸收,這樣即可輕易得到有機官能基光譜並分析之

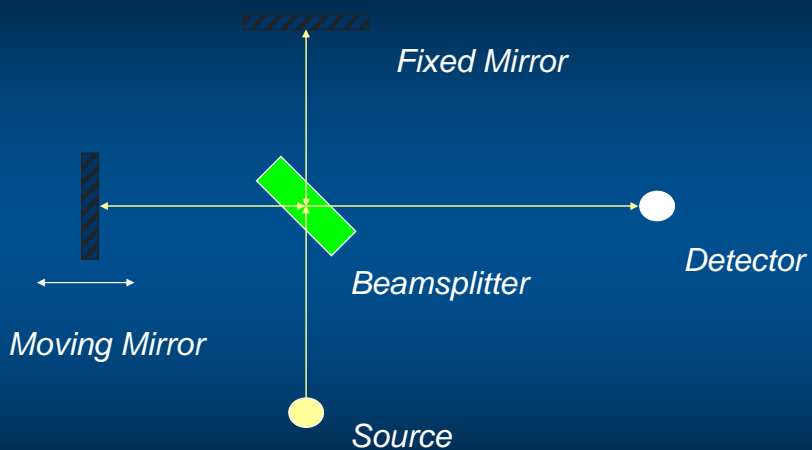


## FT- IR簡單結構圖



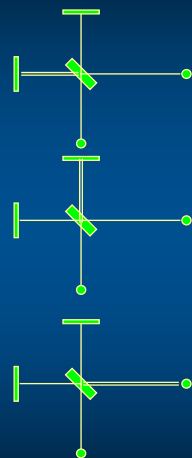
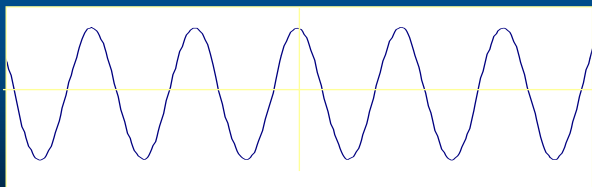
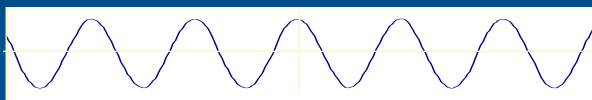
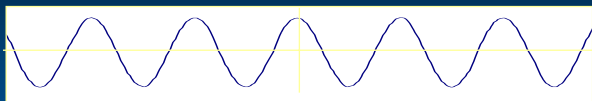
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## FT-IR Interferometer干涉儀



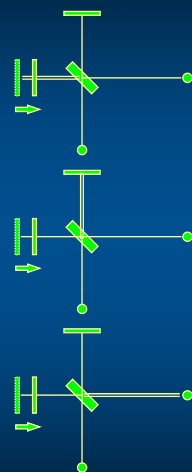
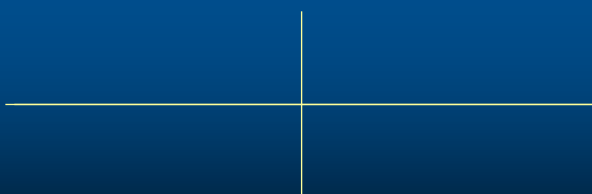
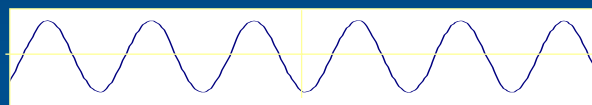
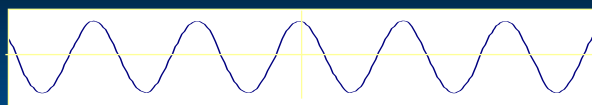
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## 建設性干涉



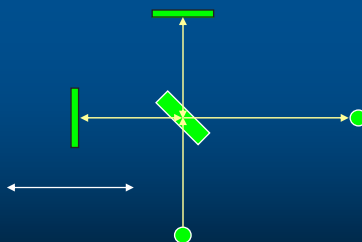
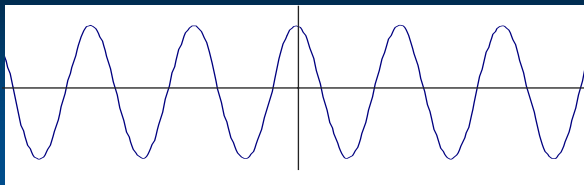
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## 破壞性干涉



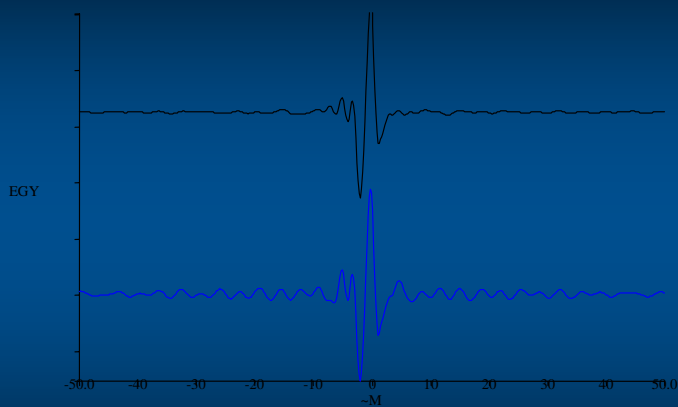
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## 干涉訊號



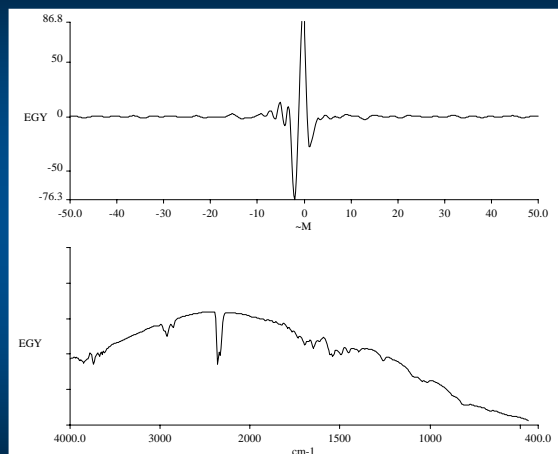
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## 干涉圖形產生



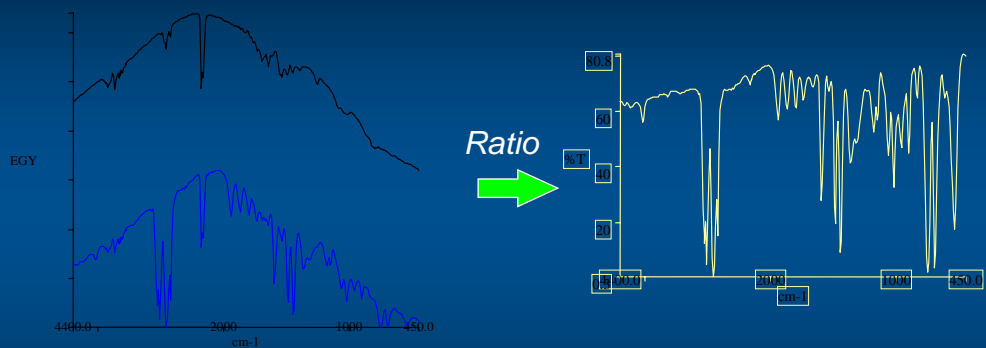
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## 傅利葉轉換



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