Most of what we know about the structure of atoms and molecules comes from studying their interaction with light (electromagnetic radiation). Different regions of the electromagnetic spectrum provide different kinds of information as a result of such interactions.

• Fundamentals of Spectroscopy

• Magnetic Resonance Spectroscopies

• Rotational Spectroscopy
• **Vibrational Spectroscopy**

![Vibrational Spectroscopy](image)

• **Electronic Spectroscopy**

![Electronic Spectroscopy](image)

• **Photoelectron Spectroscopy**

![Photoelectron Spectroscopy](image)

• **X-ray Spectroscopy**

![X-ray Spectroscopy](image)
Photoacoustic Spectroscopy

- Mössbauer Spectroscopy