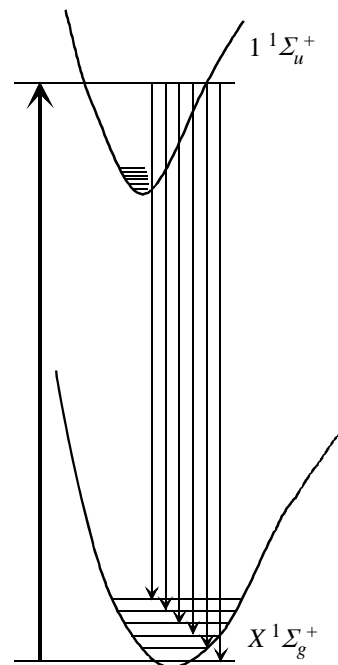


Cl₂ 励起状態の発光スペクトル



from: J. Wörmer et al., Z. Phys. **D7**, 383 (1988).

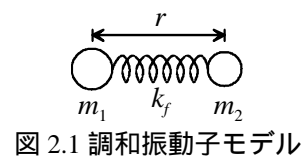


図 2.1 調和振動子モデル

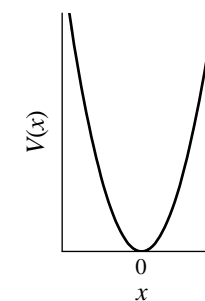


図 2.2 ポテンシャル

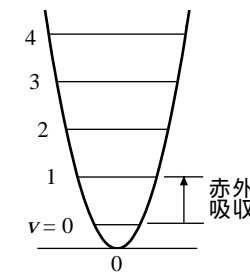


図 2.3 エネルギー準位

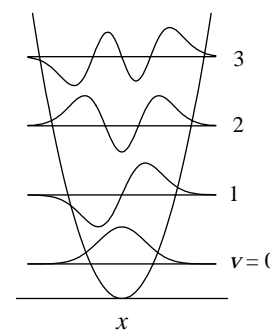


図 2.4 波動関数

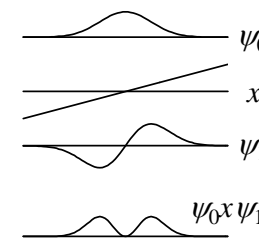


図 2.5a 許容遷移

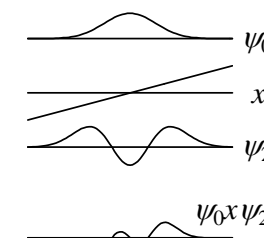
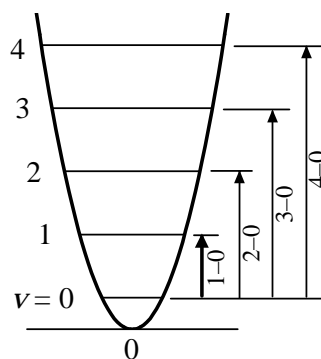
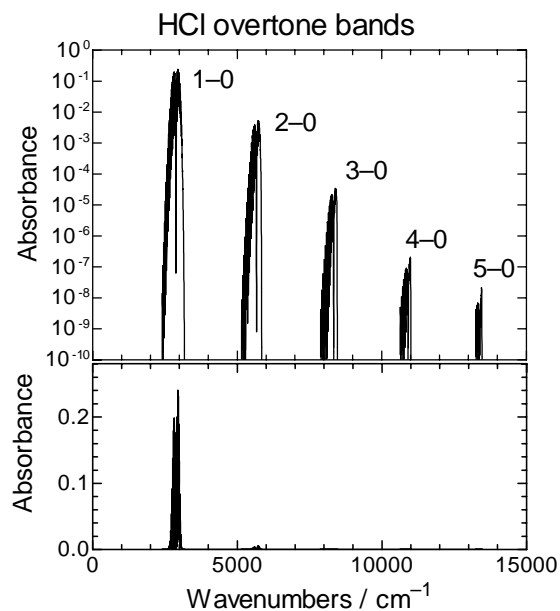


図 2.5b 禁制遷移



二原子分子の赤外吸収 cm⁻¹ (μm)

HCl	2886 (3.47)
NO	1876 (5.33)
CO	2143 (4.67)

ばね定数 [N m⁻¹] と結合次数, 結合解離エネルギー [kJ mol⁻¹]

HBr	384	1	366
Cl ₂	318	1	243
O ₂	1139	2	498
NO	1548	2.5	632
CO	1855	3	1076
N ₂	2241	3	945