Studies of key organometallic and reactive intermediates

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- Pulsed discharge source of Ni containing intermediates has been developed and used to study the Nickel monohalides, which are model systems for understanding the important role of d—electrons in chemical bonding
- Matrix isolation methods incorporating pulsed discharge sampling have been used to characterize pre-reactive complexes involving halogen atoms
- Isopolyhalomethanes, important reactive intemediates in the halon family have been characterized using matrix isolation methods

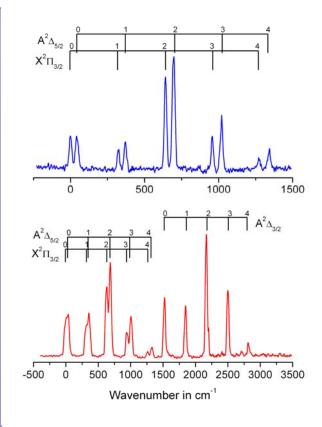


Figure 1. SVL spectrum of NiBr recorded via the $[21.8]^2\Delta_{5/2}$ v = 1 level using a 600 l/mm grating (lower trace) and an 1800 l/mm grating (upper trace).