P4945: **Microwave spectrum of triflic acid dihydrate and trihydrate:**

Evidence for complete proton transfer in a microsolvated superacid

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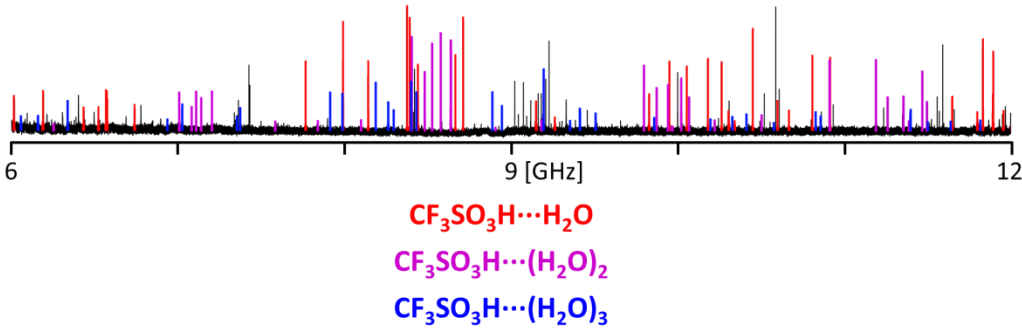
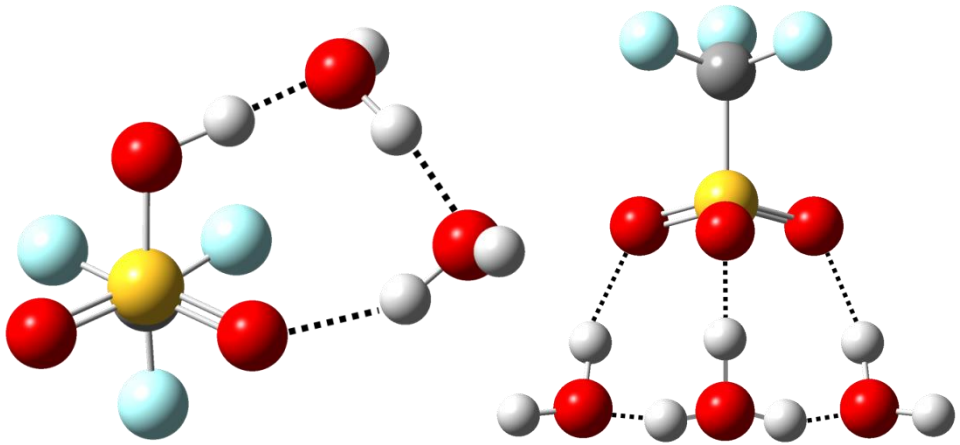
- Microwave spectra have been observed and assigned for the triflic acid dihydrate and trihydrate
- For the triflic acid trihydrate, the conformers in which the triflic acid proton has transferred to form an eigen-like cation are lower in energy than the hydrogen-bonded complexes
- Experimental and theoretical results together indicate the formation of a hydrated ion pair when triflic acid is solvated by three water molecules





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