

Protonated bis(quinuclidine) included in channel thiourea-bromide and ribbons thiourea-iodide lattice: New thiourea inclusion compounds

Merchán, Juan

Yutronic, Nicolás

Jara, Paul

Garland, María Teresa

Baggio, Ricardo

Host-guest supramolecular complexes are of special interest for understanding the chemistry in low dimensional spaces. The molecular recognition involved in the formation of such structures sometimes may be a relevant model for the kind of organized system usually found in living organisms. Matrix effects and anisotropic features which are habitual of the chemistry in restricted spaces also appear as useful for the development of new material of scientific and technological importance (Takemoto and Sonoda, 1984). Urea and thiourea clathrates constitute interesting systems in which the matrix being structured by hydrogen bond interactions has a relatively high liability to structural changes caused by the interaction with the host (Lehn, 1996). The syntheses and crystal structure of two novel ternary inclusion compounds having protonated bis (quinuclidine) as a guest into anionic thiourea-bromide and thiourea-iodide hosts are reported:

(thiourea₂[quinuclidine 2H]⁺Br⁻), 1 and (thiourea 2