## Spontaneous Resolutions in Halogen Bonded Fluorinated Networks

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Halogen bonding is an efficient tool for self-assembling haloperfluorocarbons (PFC) and hydrocarbons (HC) [1]. Its particular ability to control spontaneous resolution in hybrid PFC-HC systems has been discovered only recently [2]. Up to now we observed spontaneous resolutions in four cases affording chiral cocrystals, space group  $P2_12_12_1$ . Three of them involved long-chain iodo-PFC's (C<sub>8</sub>-C<sub>10</sub>) with either QUATS or *N,N,N',N'*-tetramethyl-*p*phenylendiamine as bases. Their different features with regard to the segregation behaviour and the conformation of the PFC chains will be outlined. The X-ray structure of a chiral alkali halide complex **1** (Figure) involving a tripodand will also be presented.



[1] Metrangolo P., Neukirch H., Pilati T., Resnati G., *Acc. Chem. Res.*, 2005, *in press.* [2] Neukirch H., Guido E., Liantonio R., Metrangolo P., Pilati T., Resnati G., *Chemm. Commun.*, 2005, 1534.

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