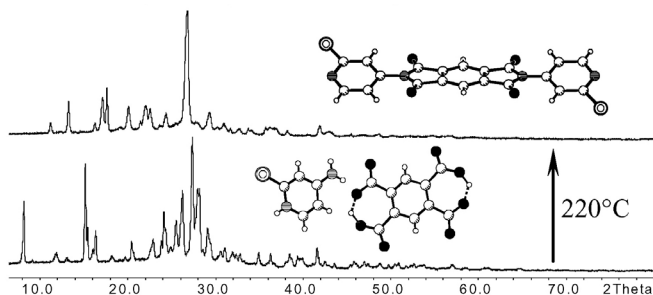


Inter- and Intra-solid Reactions Studied by X-ray Powder Diffraction

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In solid state chemistry when only microcrystalline materials are obtained, X-ray powder diffraction becomes the most important tool for analysing unknown phases. *Ab-initio* structure determinations have been carried out on metal organic compounds obtained in solid state transformation processes [1,2], and on new organic materials. The latter were synthesised by solvent free reactions applying green chemistry principles. The competition of inter- and intramolecular interactions in organic crystals and co-crystals will be discussed.



[1] Neels A., Wang Y., Stoeckli-Evans H., *Z. Kristallogr.*, 2004, **219**, 892. [2] Neels A., Alfonso M., González D., Stoeckli-Evans H., *Chimia*, 2003, **57**, 619.

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