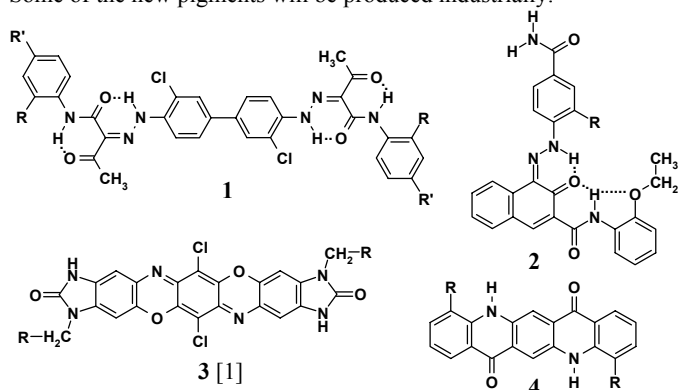


Crystal Engineering on Organic Pigments

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The crystal structures of compounds **1-3** were determined from scratch by X-ray powder diffraction. Structure-property relationships were determined. Lattice energy calculations showed, how the crystal structures of **1-4** should be changed to improve the properties of the pigments (colour strength (**1**), weather fastness (**2**), density (**3**), and colour (**4**)). The corresponding new compounds or solid solutions were synthesized, and the improvements were proven experimentally. Some of the new pigments will be produced industrially.



R, R' = H, CH₃, OCH₃, F, Cl, Br, ...

[1] Schmidt M.U., Ermrich M., Dinnebier R.E., *Acta Cryst.*, 2005, **B61**, 37.

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