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N-Substitued pyrazoles... “LEGO®” for Chemists? B. Scott, C. Aäkeroy, J.Desper, Dept. of Chemistry, Kansas State Univ. Manhattan, KS 66506 USA.

Heterocyclic molecules, *e.g.* pyrazole, are readily N-functionalized via well-established S_N2 -based reactions. If the heterocycle is appended with a sidearm that can form directional and reliable hydrogen-bond interactions, it will be a versatile building block capable of forming extended frameworks via amide-amide interactions and nitrogen-metal interactions. In addition, these new functionalized heterocycles have the potential to form ternary co-crystals through two very different binding sites, namely the amide moiety and the nitrogen atom of the heterocycle. In this study, we report the design, synthesis and characterization of a family of benzamide-pyrazole based ligands and some structural supramolecular chemistry that has been undertaken with these building blocks.