

# C-Br...Br interactions in various derivatives of benzenes and naphthalenes

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*gem*-Dibromomethyl aromatic derivatives are useful compounds for the synthesis of aromatic aldehydes [1], aromatic imines [2], aromatic acetals [3] or polymeric materials, such as poly(*p*-phenylenevinylene) (PVP) [4]. 2,3-Dicyanonaphthalenes can be synthesized from 1,2-bis(dibromomethyl)benzene and its derivatives with fumaronitrile [5]. Earlier, performed research investigated the relationship between the structures of brominated molecules, their crystal packing and the occurrence of such secondary interactions between molecules in the solid state. This systematic study has included various simple organic compounds of a similar chemical nature. First reports concerned bromomethylbenzene and related derivatives, all isomers of xylene, durene and isodurene [6], and bis(bromomethyl)naphthalene derivatives [7]. Then the research was extended to compounds in which Br atoms are also attached directly to aromatic C atoms of benzene derivatives; this provided new opportunities to observe Br...Br and H...Br interactions [8, 9]. The next step was to study the interactions in the crystal structures of selected derivatives of benzenes and naphthalenes with at least one dibromomethyl unit in the molecule [10].

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