Neue Koordinationspolymere auf der Basis der Naphthalin-1,4,5,8-tetracarboxylat-hydrate von Ca, Sr und Ba

New Coordination Polymers Based on Naphthalene-1,4,5,8-tetracarboxylate Hydrates of Ca, Sr, and Ba

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Crystals of $[Ca(NTC)(H_2O)_2] \cdot H_2O$ (**1**) (NTC = naphthalene-1,4,5,8-tetracarboxylate-1,8-monoanhydride) and $[Sr_2(NTC)_2(H_2O)_8] \cdot H_2O$ (**3**) were obtained by layering an aqueous solution of sodium naphthalene-1,4,5,8-tetracarboxylate with an aqueous solution of $CaCl_2$ or $SrCl_2$, respectively. Crystals of $[Sr(NTC)(H_2O)_2] \cdot 2H_2O$ (**2**) and $[Ba(NTC)(H_2O)_2]$ (**4**) were obtained by gel crystallisation. The NTC in **1** and **2** is tridentate, and in **4** pentadentate, forming bonds to the cations using the oxygen atoms of the carboxylate and one oxygen atom of anhydride groups. In **3** the cations are associated only *via* the oxygen atoms of carboxylate groups. **1** and **2** have layer structures, **3** has a chain structure, and **4** forms a three-dimensional coordination network. The number of O atoms around the cations is eight for **1**, **2** and **4**, and nine for **3**.

Key words: Crystal Structure, Naphthalene-1,4,5,8-tetracarboxylate, Calcium, Strontium, Barium