Syntheses and crystal structures of the first zinc complex with 1,3,5-triaza-7-phosphaadamantane (PTA), [$ZnCl_2(PTA)_2$], and of the hybrid organic-inorganic salts of *N*-methyl-1,3,5-triaza-7-phosphaadamantane with tetrahalozinc [PTA-Me]$_2$[ZnI_2X_2] (X =I,Cl).

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The Zn^{II} compounds [$ZnCl_2(PTA)_2$] (**1**) (PTA = 1,3,5-triaza-7-phosphaadamantane) and [PTA–Me]$_2$[ZnI_2X_2] [X = Cl (**2a**), X = I (**2b**); PTA–Me = *N*-methyl-1,3,5-triaza-7-phosphaadamantane] have been prepared by treating $ZnCl_2$ with PTA and [PTA–Me]I, respectively, in methanol at room temperature. They are soluble in polar solvents such as water and methanol, stable in air, and have been characterized by IR, ^{1}H NMR, ^{31}P{^{1}H} NMR, and ^{13}C{^{1}H} NMR spectroscopy, ESI-MS, elemental and single-crystal X-ray diffraction structural analyses (for **1** and **2a**). Compound **1** exhibits a nearly regular tetrahedral Zn coordination, with the PTA ligands displaying the uncommon *N*-coordination with a low ^{31}P NMR coordination shift. The molecular structure of **2a** bears one discrete tetrahedral [ZnI_2Cl_2]$^{2-}$ anion and two cage-like [PTA–Me]$^+$ cations, one of them being located in a void. Compound **1** represents the first example of a Zn complex bearing PTA or any derived ligand with a cage-like PTA cor

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