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Imides of 2-Trifluoroacetylphenol and other Trifluoroacetic acid Esters: Novel Reactions with Phosphorus(III) Derivates

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The imido derivatives of 2-trifluoroacetylphenol, **1** ($R^1=H, Me, iPr$) react with the isocyanatophosphites (R^2O)₂PNCO, **2** ($R^2=Et, R^2-R^2=CMe_2-CMe_2$) to yield the bicyclic compounds **3**, whereas in case of **1** ($R^1=(CH_2)_2NMe_2$) the $\lambda^3\sigma^3P$ compounds **4** are found. The phosphorus(III) chlorides R^3PCl_2 ($R^3=Ph, OEt$) and **1** ($R^1=H, Me$) give rise to furnish the tricyclic phosphoranes **5**. However with **1** ($R^1=iPr$) phosphite **6** is obtained, which adds hexafluoroacetone to give the 1,3,2 $\lambda^5\sigma^5$ -dioxaphospholane **7**. 2-(Trifluoroacetoxy)pyridine **8** reacts with Tris(trimethylsilyl)phosphite to yield the bis(phosphonate) **10**. Some molecular structures are discussed on the basis of x-ray diffraction results.

