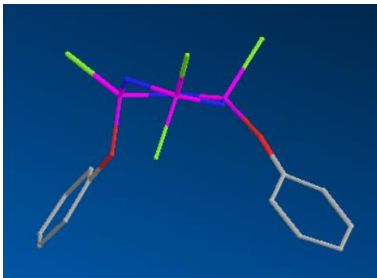
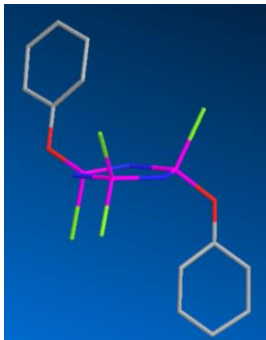
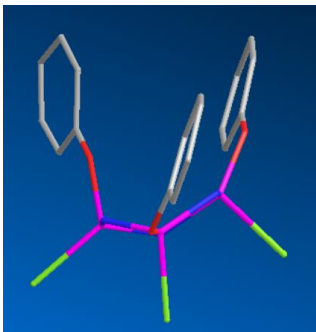
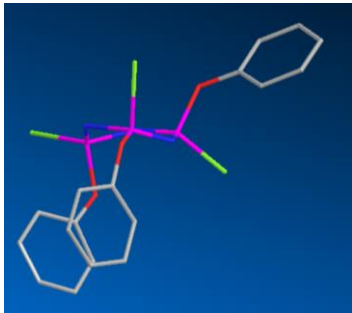
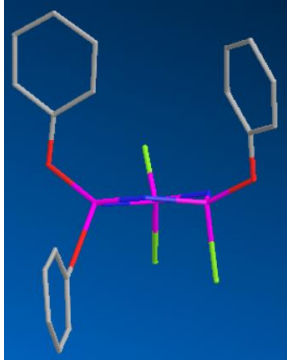
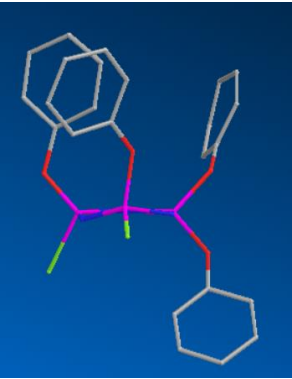
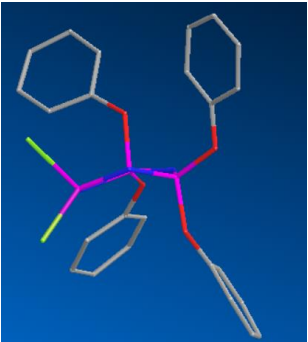
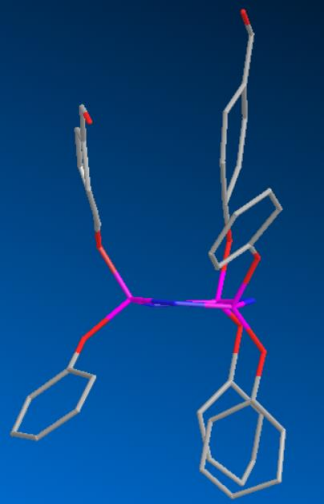
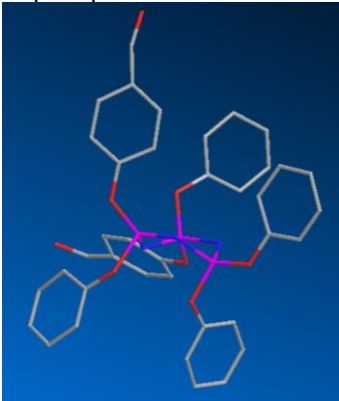
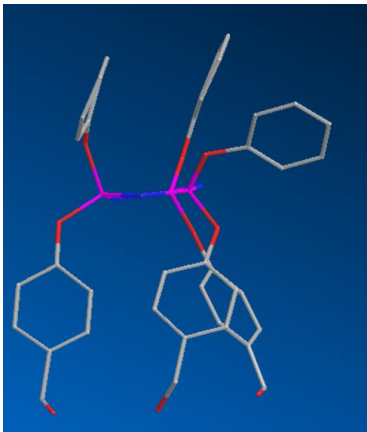
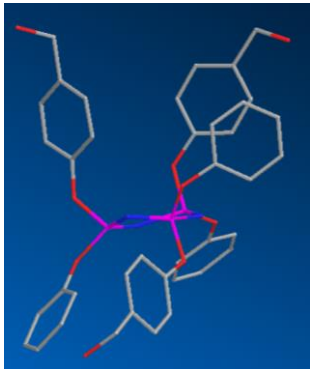
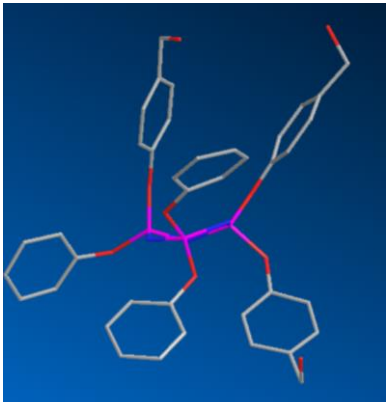
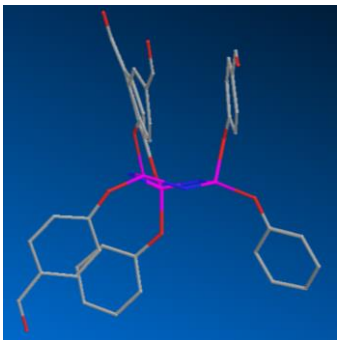
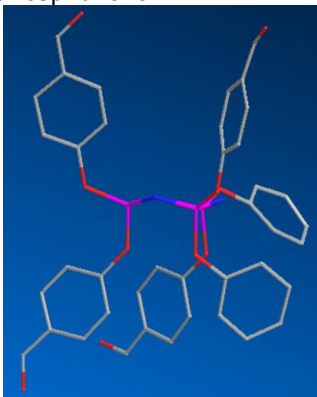
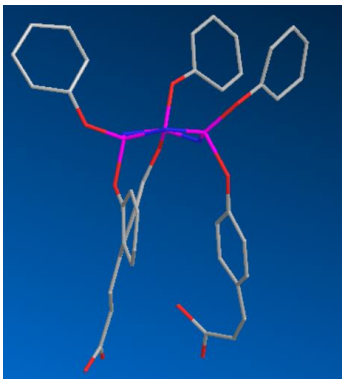
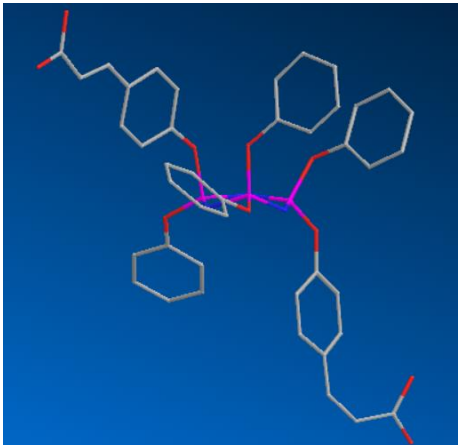


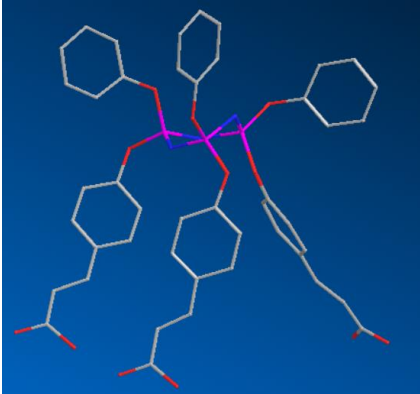
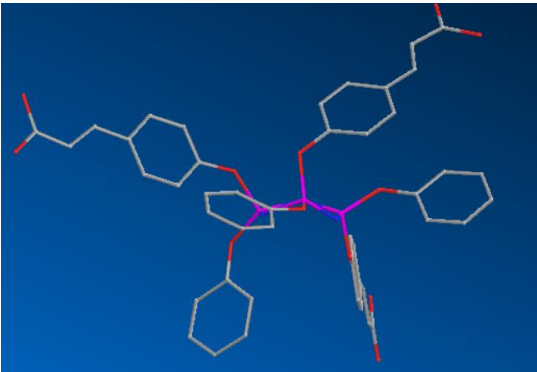
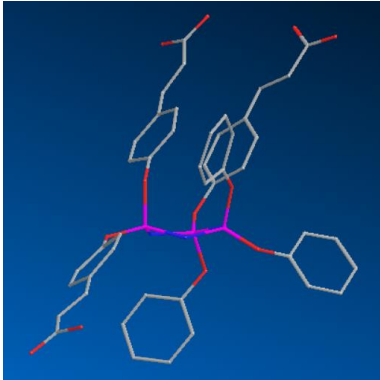
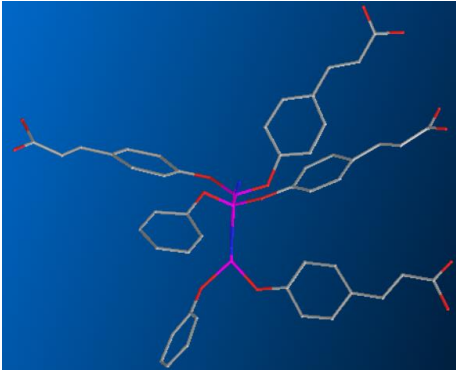
Table S1. Values of the diameters of the sphere described around molecules of di-, tri- and tetra-derivatives contained in CPP, FPPP and CPPP and their mole fractions.

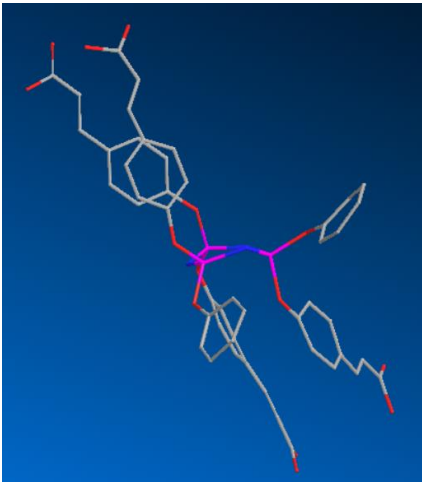
Contained in CPP, FPPP and CPPP derivatives	Mole fractions, % (Approximate content)	Diameter of sphere, nm
<i>Nongem-cis</i> -diphenoxy-tetrachlorocyclotriphosphazene 	3	0.84
<i>Nongem-trans</i> -diphenoxy-tetrachlorocyclotriphosphazene 	6	1.10
<i>Nongem-cis</i> -trichloro-triphenoxycyclotriphosphazene 	9	0.82
<i>Nongem-trans</i> -trichloro-triphenoxycyclotriphosphazene 	31	1.17

<p><i>Gem</i>-trichloro-triphenoxycyclotriphosphazene</p> 	31	0.91
<p><i>Nongem-cis</i>-dichloro-tetraphenoxycyclotriphosphazene</p> 	7	1.09
<p><i>Nongem-trans</i>-dichloro-tetraphenoxycyclotriphosphazene</p> 	13	1.15
<p><i>Nongem-cis</i>-bis[4-formylphenoxy]-tetraphenoxycyclotriphosphazene</p> 	7	1.32

<p><i>Nongem-trans</i>-bis[4-formylphenoxy]- tetraphenoxycyclotriphosphazene</p> 	13	1.38
<p><i>Nongem-cis</i>-tris[4-formylphenoxy]- triphenoxycyclotriphosphazene</p> 	9	1.33
<p><i>Nongem-trans</i>-tris[<i>p</i>-formylphenoxy]- triphenoxycyclotriphosphazene</p> 	31	1.38
<p><i>Gem</i>-tris[4-formylphenoxy]-triphenoxycyclotriphosphazene</p> 	31	1.46

<p><i>Nongem-cis</i>-tetrakis[4-formylphenoxy]-diphenoxycyclotriphosphazene</p> 	3	1.33
<p><i>Nongem-trans</i>-tetrakis[4-formylphenoxy]-diphenoxycyclotriphosphazene</p> 	6	1.67
<p><i>Nongem-cis</i>-bis[4-(β-carboxyethenyl)phenoxy]-tetraphenoxycyclotriphosphazene</p> 	7	1.34
<p><i>Nongem-trans</i>-bis[4-(β-carboxyethenyl)phenoxy]-tetraphenoxycyclotriphosphazene</p> 	13	1.98

<p><i>Nongem-cis</i>-tris[4-(β-carboxyethenyl)phenoxy]-triphenoxycyclotriphosphazene</p> 	9	1.68
<p><i>Nongem-trans</i>-tris[4-(β-carboxyethenyl)phenoxy]-triphenoxycyclotriphosphazene</p> 	31	1.90
<p><i>Gem</i>-tris[4-(β-carboxyethenyl)phenoxy]-triphenoxycyclotriphosphazene</p> 	31	1.91
<p><i>Nongem-cis</i>-tetrakis[4-(β-carboxyethenyl)phenoxy]-diphenoxycyclotriphosphazene</p> 	3	1.93

<p><i>Nongem-trans-tetrakis[4-(β-carboxyethenyl)phenoxy]- diphenoxycyclotriphosphazene</i></p> 	6	1.89
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	------



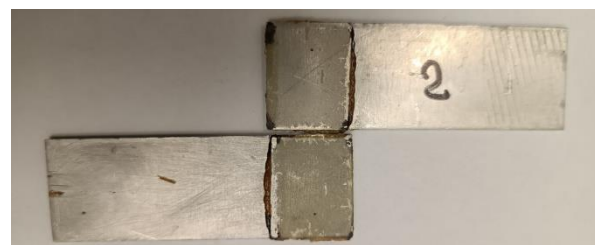
A



B



C



D

Figure S1. Testing samples for adhesion strength: glued plates of steel (A) and aluminum (C); plates after testing in steel (B) and aluminum (D).



A



B



C



D



E

Figure S2. Testing samples for combustion resistance: A – bringing a flame to the sample; B – combustion process; C – self-extinguishing; D – original sample; E – sample after combustion.