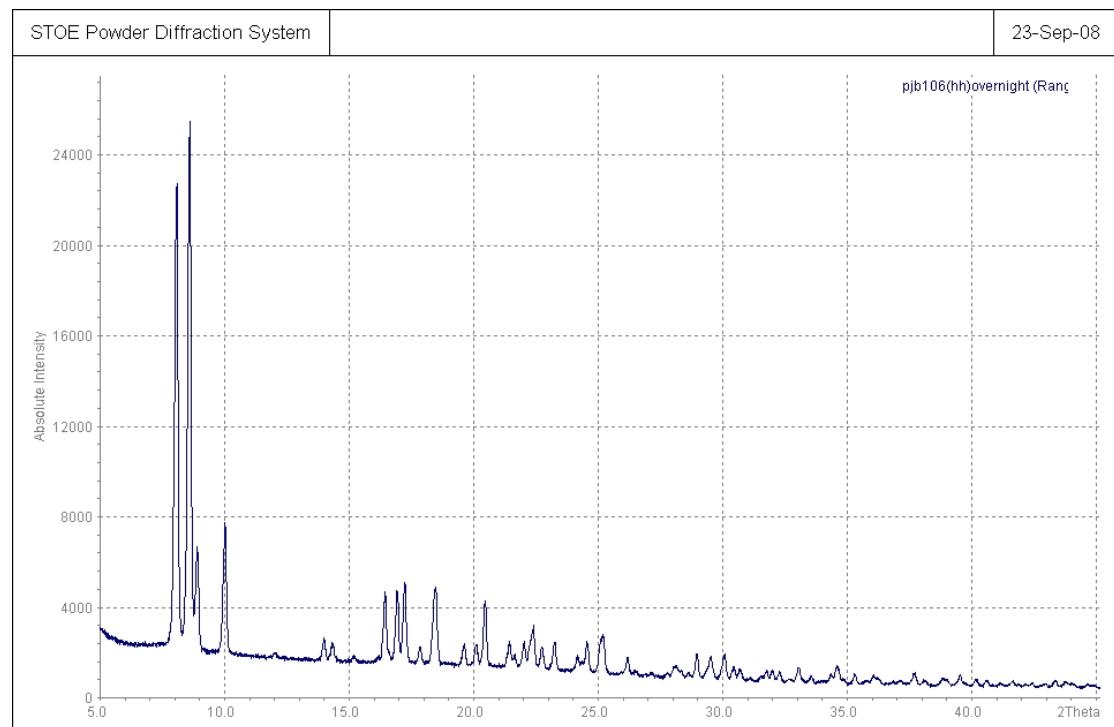


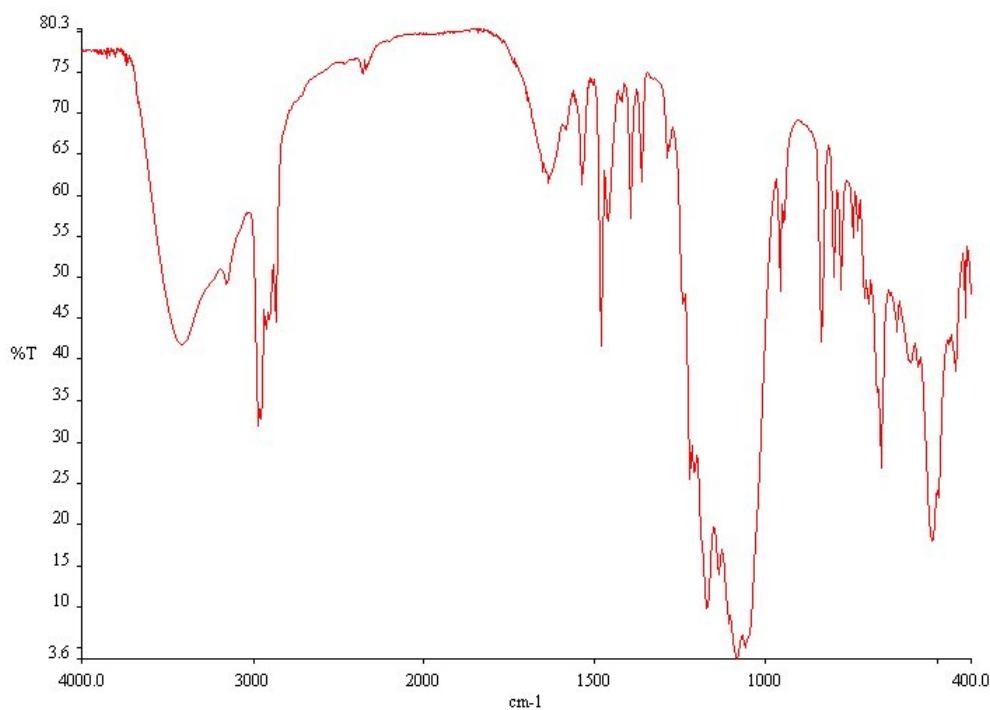
## Ionochemical synthesis of two novel metal organophosphonates

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### Supplementary information.



**Figure 1:** Powder diffraction of compound 1.

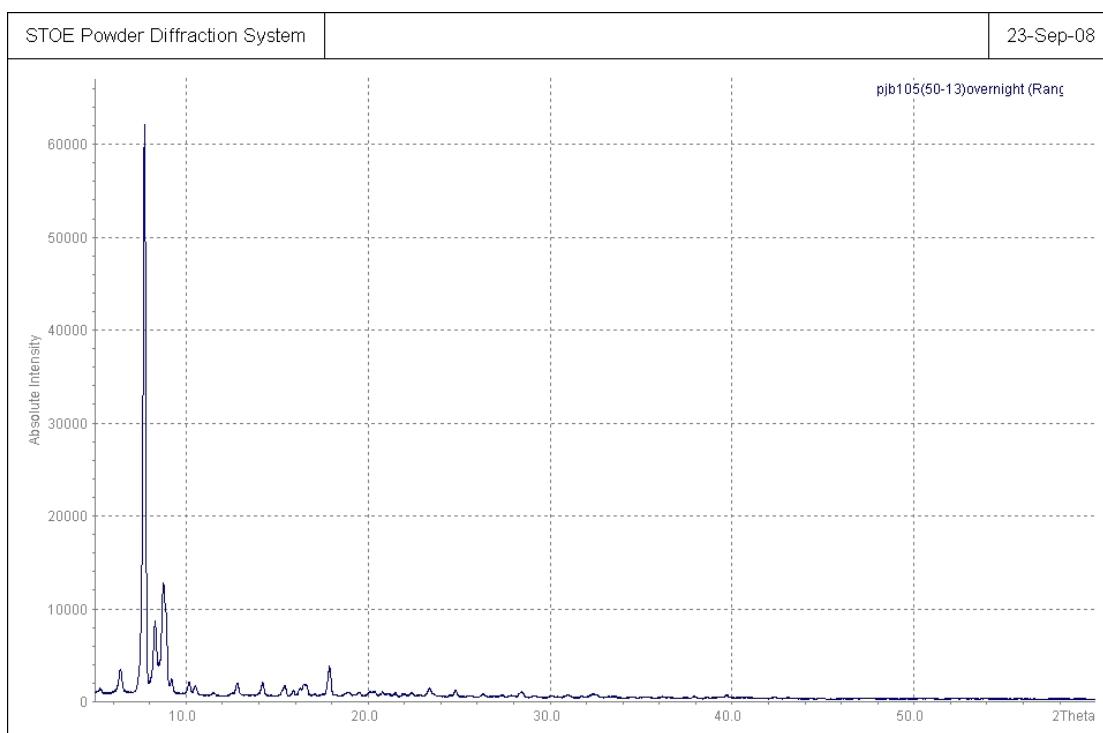


**Figure 2:** IR of compound 1 with characteristic hydroxyl peak at 3500cm<sup>-1</sup>.

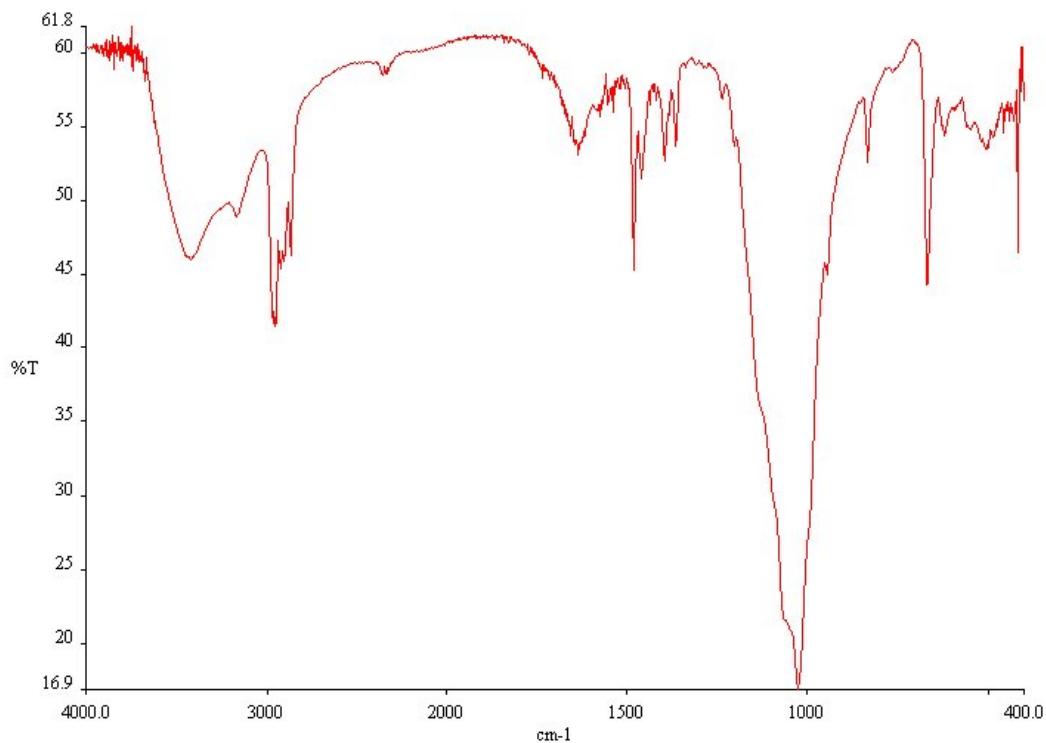
**Table 1:** Hydrogen bond table for compound 1, bond, bond length and angles.

|                           |             |             |                  |            |
|---------------------------|-------------|-------------|------------------|------------|
| C86 -- H1A .. O1          | 0.96        | 2.6         | 3.268(10)        | 127        |
| C43 -- H6C .. O34         | 0.96        | 2.5         | 3.179(12)        | 128        |
| C20 -- H20B .. O32        | 0.96        | 2.59        | 3.000(13)        | 106        |
| C20 -- H20C .. O34        | 0.96        | 2.54        | 3.456(12)        | 161        |
| C72 -- H21 .. O32         | 0.93        | 2.53        | 2.925(12)        | 106        |
| C74 -- H23 .. O15         | 0.93        | 2.57        | 2.950(16)        | 105        |
| <u>C31 -- H26A .. O31</u> | <u>0.96</u> | <u>2.53</u> | <u>2.995(14)</u> | <u>109</u> |

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**Figure 3:** Powder diffraction of compound 2.



**Figure 4:** IR of compound 2.

**Table 2:** Hydrogen bond table for compound 2, bond, bond length and angle.

O32 -- H32 .. O12      0.82      1.75 2.494(12)      150

**CHN analysis**

Theoretical in brackets

C= 27.49% (30.5%), H= 4.86% (5.7%), N=2.35% (1.8%)