Table S1 Characteristic IR absorption bands of the compound $[Cr_2Zn(C_2O_4)_4(OH_2)_6]\cdot 4H_2O$.

$[Cr_2Zn(C_2O_4)_4(OH_2)_6]\cdot 4H_2O$	
Wavenumber [cm^{-1}]	Assignment
3565 s,b	$\nu_{(OH)}$, $\nu_{(H2O)}$
1719 s	$\nu_{asym(O=C-O)}$
1622 vs	$\nu_{asym(OCO)} + \delta_{(H2O^*)}$
1391 m	$\nu_{sym(OCO)} + \nu_{(C-C)}$
1268 m	$\nu_{sym(O=C-O)}$
1081 w	$\nu_{(C-O)}$
910 w	$\delta_{asym(OCO)}$
813 w	coordinated water
400-500 w	$\nu_{(Cr(III)-O)}$; $\nu_{(Zn(II)-O)}$

s- strong (v - very); b - broad; m - medium; w – weak; H_2O^*- coordinated water.

Table S2 Characteristic IR absorption bands of the oxalic acid.

$\nu_{(OH)}$,$\nu_{(H2O)}$	**$\nu_{asim(COO)}$**	**$\nu_{sim(CO)} + \delta_{(OCO)}$**	**$\nu_{(C-OH)}$**	**$\delta_{(OCO)}$**	**$\delta_{(CCO)}$**
3426 s,b	1703s	1261 vs	1129 m	721 s	481 s

s- strong (v - very); b - broad; m - medium; w – weak.