



STRUCTURAL  
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**Supporting information for article:**

**Crystal structure, shape analysis and bioactivity of new Li<sup>I</sup>, Na<sup>I</sup> and Mg<sup>II</sup> complexes with 1,10-phenanthroline and 2-(3,4-dichlorophenyl)acetic acid**

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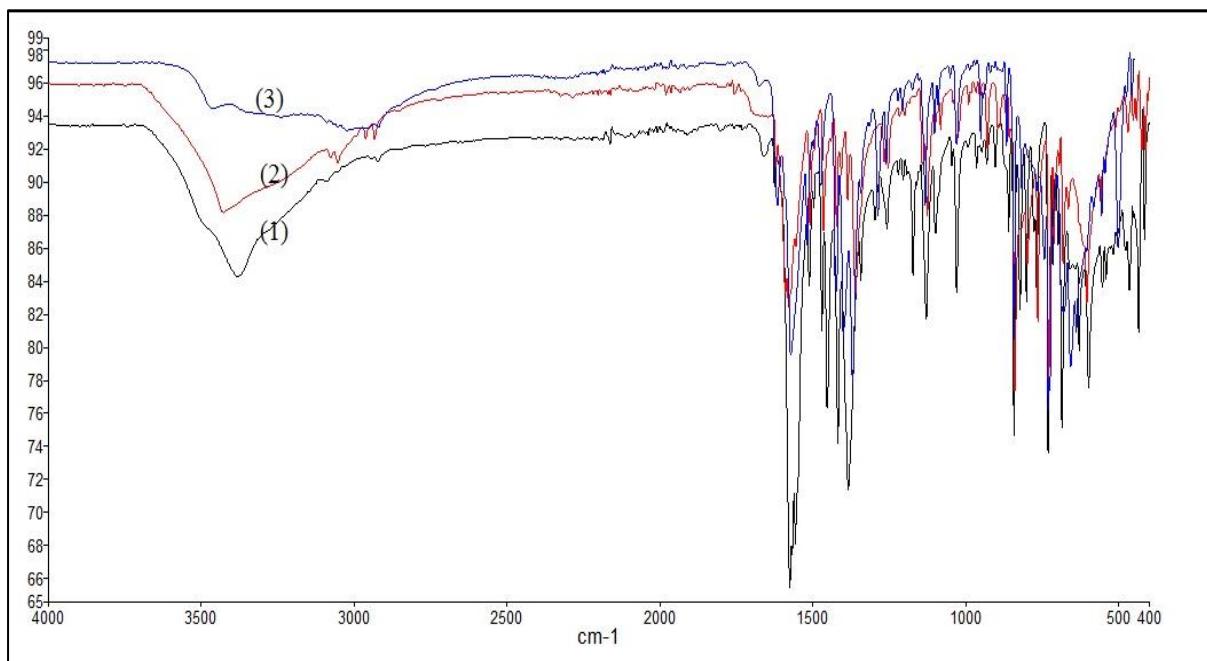


Figure S1: FT-IR Spectra of complexes **1** – **3**.

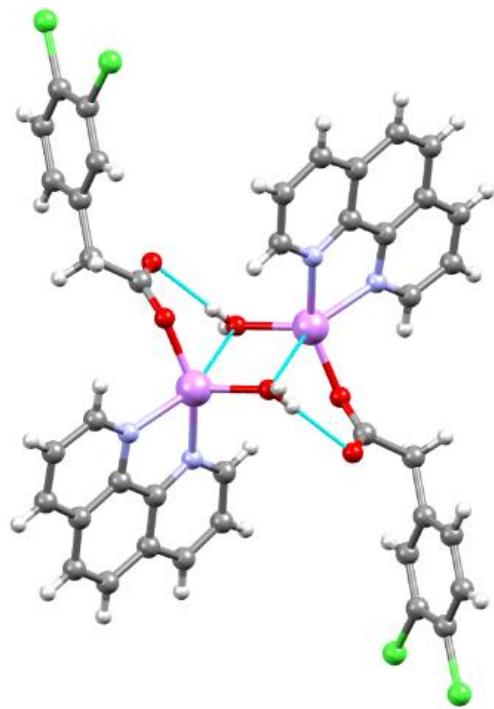
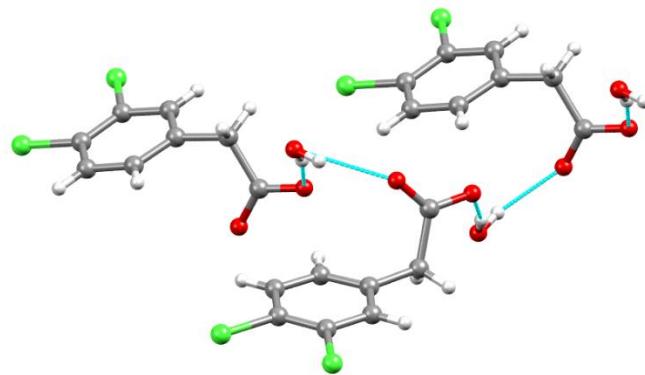


Figure S2: Hydrogen bonded dimeric unit in **1**

Figure S3: Hydrogen bonding between un-coordinated lattice **dca**<sup>-</sup> and water molecules in **3**Table S1: Continuous Shape Measures calculation in **1**

	SP-4	T-4	SS-4
	Square ( <b>D</b> <sub>4h</sub> )	Tetrahedron ( <b>T</b> <sub>d</sub> )	Seesaw ( <b>C</b> <sub>2v</sub> )
CshM	13.20	7.52	3.862

Table S2: Continuous Shape Measures calculation in **2**

PP-5	vOC-5	TBPY-5	SPY-5	JTBPY-5
Pentagone ( <b>D</b> <sub>5h</sub> )	Vacant octahedron ( <b>C</b> <sub>4v</sub> )	Trigonal bipyramide ( <b>D</b> <sub>3h</sub> )	Spherical square pyramid ( <b>C</b> <sub>4v</sub> )	Johnson trigonal bipyramide J12 ( <b>D</b> <sub>3h</sub> )
CshM	25.46	4.64	3.862	8.51

Table S3: Continuous Shape Measures calculation in **3**

HP-6	PPY-6	OC-6	TPR-6	JPPY-6
Hexagon ( <b>D</b> <sub>6h</sub> )	Pentagonal pyramid ( <b>C</b> <sub>5v</sub> )	Octahedron ( <b>O</b> <sub>h</sub> )	Trigonal prism ( <b>D</b> <sub>3h</sub> )	Johnson pentagonal pyramid J2 ( <b>C</b> <sub>5v</sub> )
CshM	32.58	26.49	0.641	13.80
				29.78