

## Article

# Salts and Co-crystals of Gentisic Acid with Pyridine Derivatives: The Effect of Proton Transfer on the Crystal Packing (and Vice Versa)

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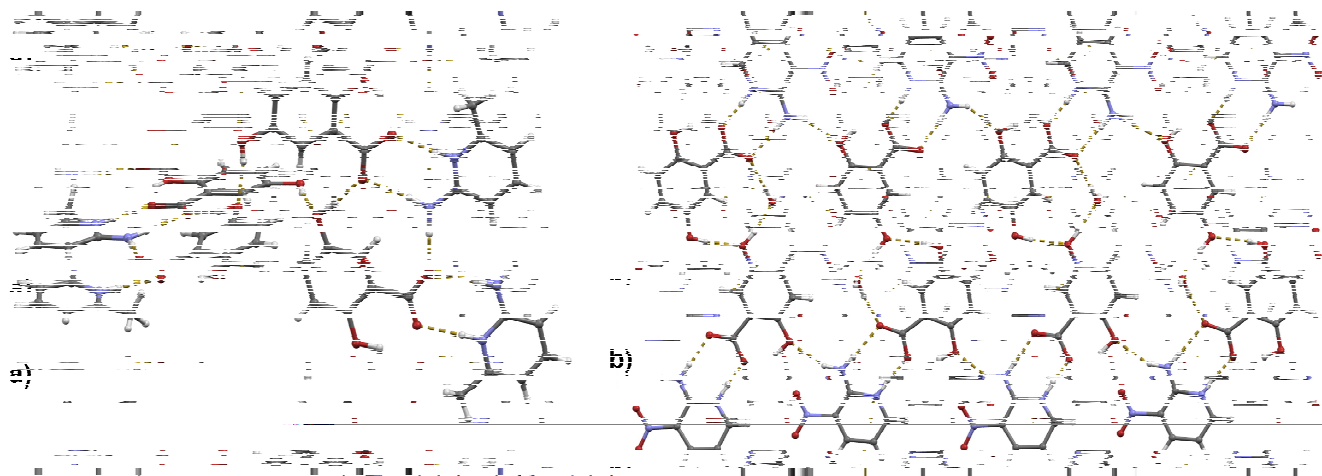






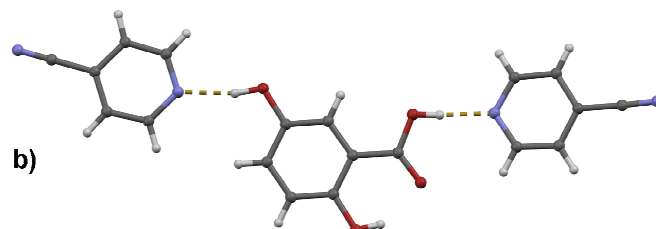
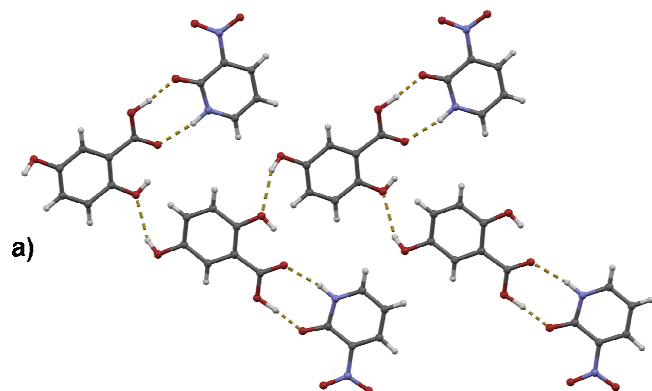






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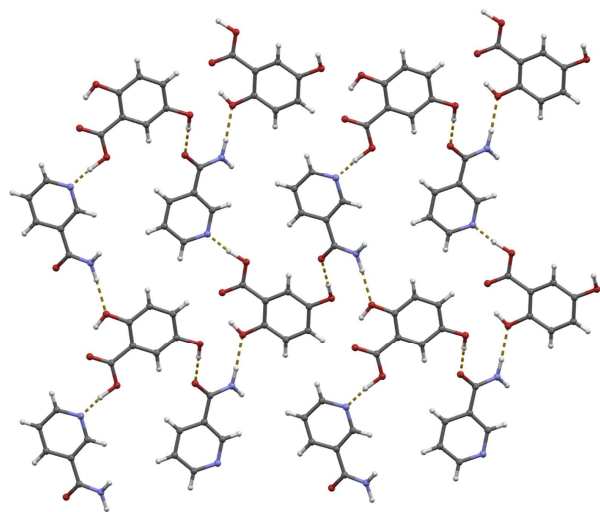


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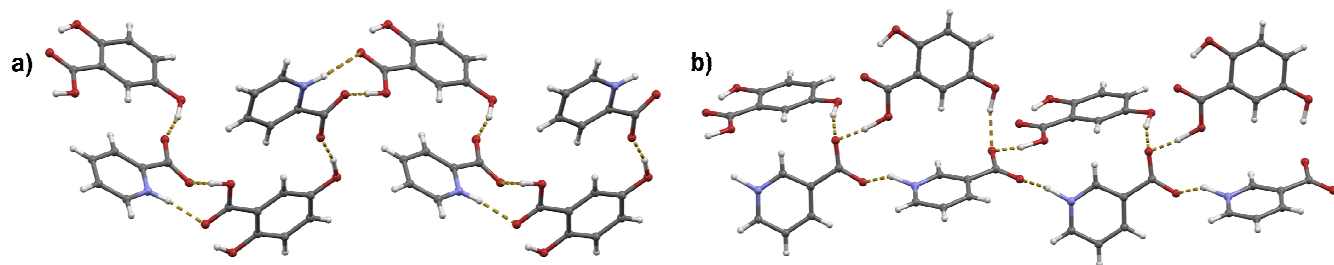
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Figure 1. Crystal structures of the complexes. (a) 3D model of the complex (M4LLL)EY\*4. (b) 3D model of the complex (M4LLL)EY\*4.

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Pyridine derivative	pK <sub>a</sub> <sup>a</sup>	ΔpK <sub>a</sub>	Formula of the obtained compound	Proton transfer	Supramolecular motif
pyridine	5.32	2.5	<b>1H gent</b>	+	chain
2-methylpyridine	6.06	3.3	<b>2H gent</b>	+	chain
3-methylpyridine	5.81	3.0	<b>3H gent</b>	+	chain
4-methylpyridine	6.0	3.2	<b>4H gent</b>	+	dimer
3,5-dimethylpyridine	6.24	3.4	<b>5H gent</b>	+	chain
2,4,6-trimethylpyridine	7.48	4.7	<b>6H gent</b>	+	chain
2-aminopyridine	6.67	3.9	<b>7H gent</b>	+	chain
2-amino-6-methylpyridine	7.22	4.4	<b>8H gent</b>	+	tetramer
2-amino-3-methylpyridine	7.47	4.7	<b>9H gent</b>	+	dimer
2-amino-3-hydroxypyridine	5.89	3.1	<b>11H gent</b>	+	chain
3-hydroxypyridine	5.0	2.2	<b>13H gent</b>	+	chain
nicotic acid	4.79	2.0	<b>14 · gentH</b>	–	pyridine chain
nicotinamide	3.5	0.7	<b>15 · gentH</b>	–	3D network
picolic acid	5.22	2.4	<b>16 · gentH</b>	–	2D layers
methyl nicotinate	3.13	0.3	<b>(17)<sub>2</sub> · gentH</b>	–	discrete complex
methyl isonicotinate	6.8	4.0	<b>18H gent</b>	+	dimer
4,4'-bipyridine	4.80, 2.94	2.0, 0.14	<b>19H<sub>2</sub> · gent<sub>2</sub></b>	++	chain
		2.0, 0.14	<b>19H · gent · gentH</b>	+/-	chain



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4-cyanopyridine	2.1	-0.7	(20) <sub>2</sub> · gentH	-	discrete complex
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