

Cocrystals versus salts of fluorescein

Mihai Răducă ¹ and Augustin M. Mădălan ^{1,*}¹ Inorganic Chemistry Department, Faculty of Chemistry, University of Bucharest, 23 Dumbrava Rosie, 020464-Bucharest, Romania; mihai.raduca@chimie.unibuc.ro; augustin.madalan@chimie.unibuc.ro

* Correspondence: augustin.madalan@chimie.unibuc.ro

Table S1. Crystallographic data, details of data collection and structure refinement parameters for compounds **1-10**

Compound	1	2	3	4	5
Chemical formula	C ₅₀ H ₃₂ N ₂ O ₁₀	C ₅₂ H ₄₀ N ₂ O ₁₂	C ₅₆ H ₄₆ N ₂ O ₁₂	C ₃₂ H ₂₂ N ₂ O ₅	C ₃₂ H ₂₄ N ₂ O ₅
M (g mol ⁻¹)	820.77	884.86	938.95	514.51	516.53
Temperature, (K)	293(2)	200(2)	173(2)	293(2)	200(2)
Wavelength, (Å)	0.71073	0.71073	0.71073	0.71073	0.71073
Crystal system	<i>Monoclinic</i>	<i>Triclinic</i>	<i>Triclinic</i>	<i>Monoclinic</i>	<i>Monoclinic</i>
Space group	<i>P21/a</i>	<i>P-1</i>	<i>P-1</i>	<i>P21/c</i>	<i>P21/a</i>
<i>a</i> (Å)	7.9518(8)	7.7851(8)	7.7463(18)	16.1599(16)	13.109(2)
<i>b</i> (Å)	19.2982(16)	12.6149(12)	12.640(3)	12.1595(8)	12.5793(14)
<i>c</i> (Å)	12.9588(11)	12.7770(13)	12.950(5)	13.0564(8)	15.8101(14)
α (°)	90	116.587(8)	108.75(2)	90	90
β (°)	95.196(8)	107.300(8)	100.06(3)	101.511(7)	102.130(13)
γ (°)	90	90.681(8)	90.911(18)	90	90
<i>V</i> (Å ³)	1980.4(3)	1055.8(2)	1178.7(6)	2513.9(3)	2548.9(5)
<i>Z</i>	2	1	1	4	4
<i>D_c</i> (g cm ⁻³)	1.376	1.392	1.323	1.359	1.346
μ (mm ⁻¹)	0.097	0.100	0.093	0.093	0.092
<i>F</i> (000)	852	462	492	1072	1080
Goodness-of-fit on <i>F</i> ²	0.825	0.927	0.794	1.061	0.972
Final <i>R</i> ₁ , <i>wR</i> ₂ [<i>I</i> >2 σ (<i>I</i>)]	0.0403, 0.0909	0.0526, 0.0921	0.0444, 0.0786	0.0937, 0.1929	0.0715, 0.1462
<i>R</i> ₁ , <i>wR</i> ₂ (all data)	0.0883, 0.1051	0.1281, 0.1162	0.1252, 0.0961	0.1943, 0.2386	0.1863, 0.2029

Compound	6	7	8	9	10
Chemical formula	C ₂₅ H ₂₂ N ₂ O ₇	C ₂₅ H ₁₈ N ₂ O ₅	C ₂₆ H ₃₂ N ₂ O ₈	C ₄₇ H ₄₅ N ₂ O _{12.5}	C ₉₈ H ₉₈ N ₆ O ₂₄
M (g mol ⁻¹)	462.44	426.41	500.53	837.85	1743.82
Temperature, (K)	200(2)	293(2)	173(2)	293(2)	293(2)
Wavelength, (Å)	0.71073	0.71073	0.71073	0.71073	0.71073
Crystal system	<i>Triclinic</i>	<i>Monoclinic</i>	<i>Triclinic</i>	<i>Triclinic</i>	<i>Triclinic</i>
Space group	<i>P-1</i>	<i>C2/c</i>	<i>P-1</i>	<i>P-1</i>	<i>P-1</i>
<i>a</i> (Å)	7.9208(13)	26.783(4)	8.0595(6)	11.2955(3)	11.8141(12)
<i>b</i> (Å)	11.1684(19)	19.468(3)	11.4011(10)	13.9824(3)	13.8225(13)
<i>c</i> (Å)	14.678(3)	7.7431(13)	13.5000(10)	14.1629(3)	14.5549(17)
α (°)	111.235(14)	90	87.086(6)	97.069(2)	98.060(8)
β (°)	92.364(14)	94.033(13)	74.482(6)	108.163(2)	103.933(9)
γ (°)	109.493(13)	90	80.885(6)	102.315(2)	109.797(7)
<i>V</i> (Å ³)	1121.3(4)	4027.5(11)	1180.12(17)	2032.75(9)	2105.6(4)
<i>Z</i>	2	8	2	2	1
<i>D_c</i> (g cm ⁻³)	1.370	1.406	1.409	1.369	1.375
μ (mm ⁻¹)	0.101	0.099	0.105	0.100	0.099
<i>F</i> (000)	484	1776	532	882	920
Goodness-of-fit on <i>F</i> ²	1.007	0.891	0.987	1.103	0.808
Final <i>R</i> ₁ , <i>wR</i> ₂ [<i>I</i> >2 σ (<i>I</i>)]	0.0701, 0.0974	0.0780, 0.1766	0.0475, 0.1133	0.0438, 0.1192	0.0605, 0.1317
<i>R</i> ₁ , <i>wR</i> ₂ (all data)	0.1908, 0.1329	0.2427, 0.2557	0.0858, 0.1265	0.0536, 0.1257	0.1846, 0.1713

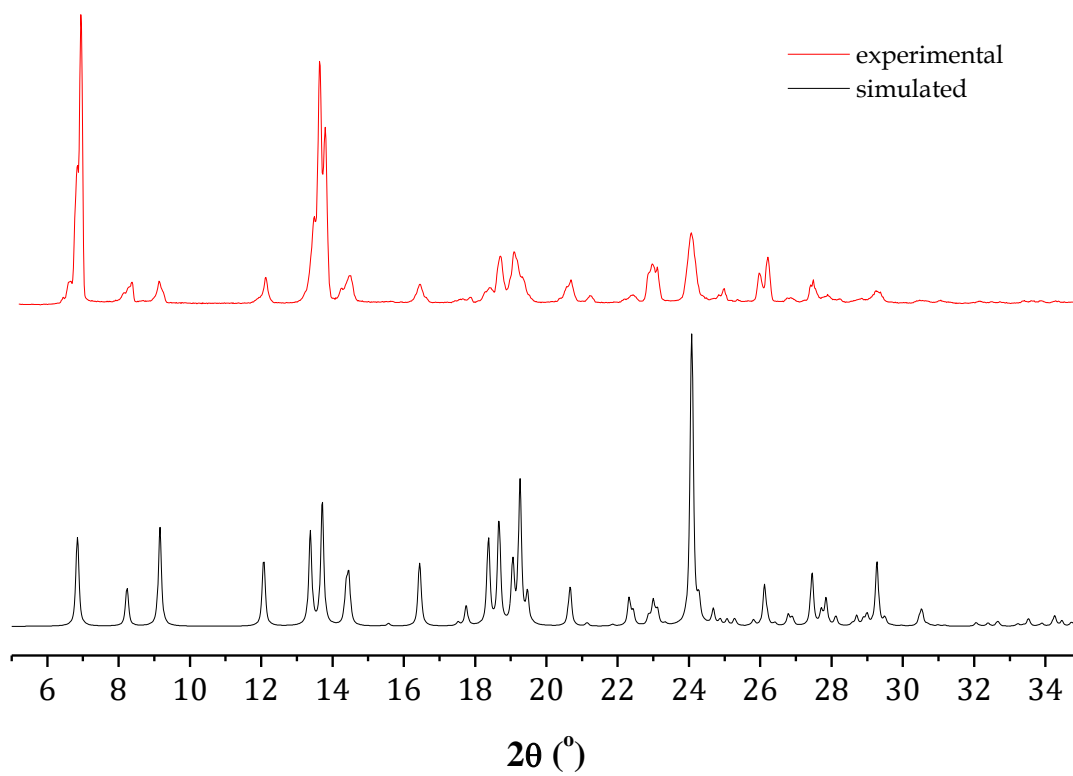


Figure S1. Measured (red) and calculated (black) powder X-ray diffraction patterns of **1**.

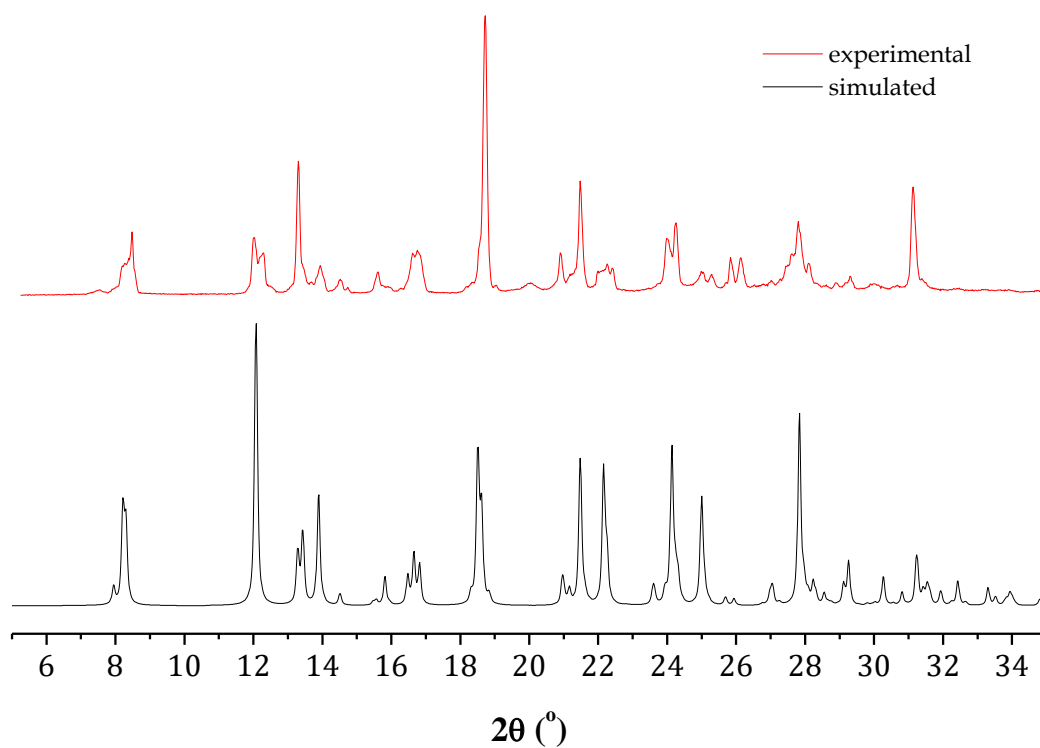


Figure S2. Measured (red) and calculated (black) powder X-ray diffraction patterns of **2**.

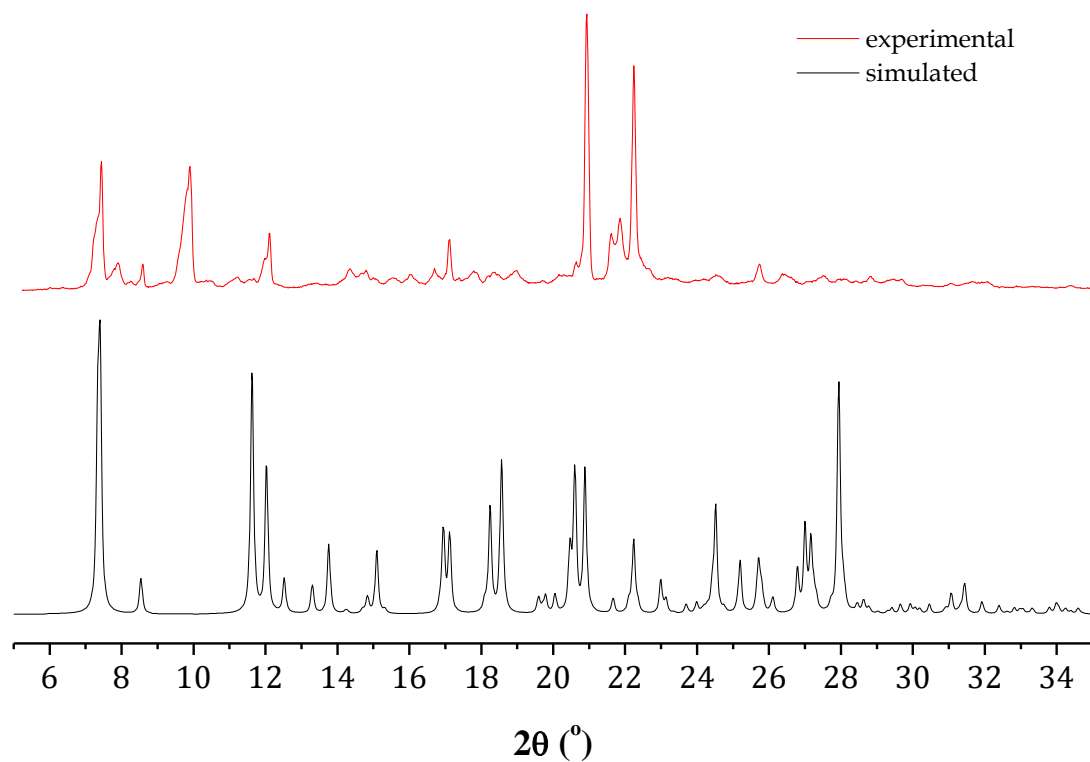


Figure S3. Measured (red) and calculated (black) powder X-ray diffraction patterns of **3**.

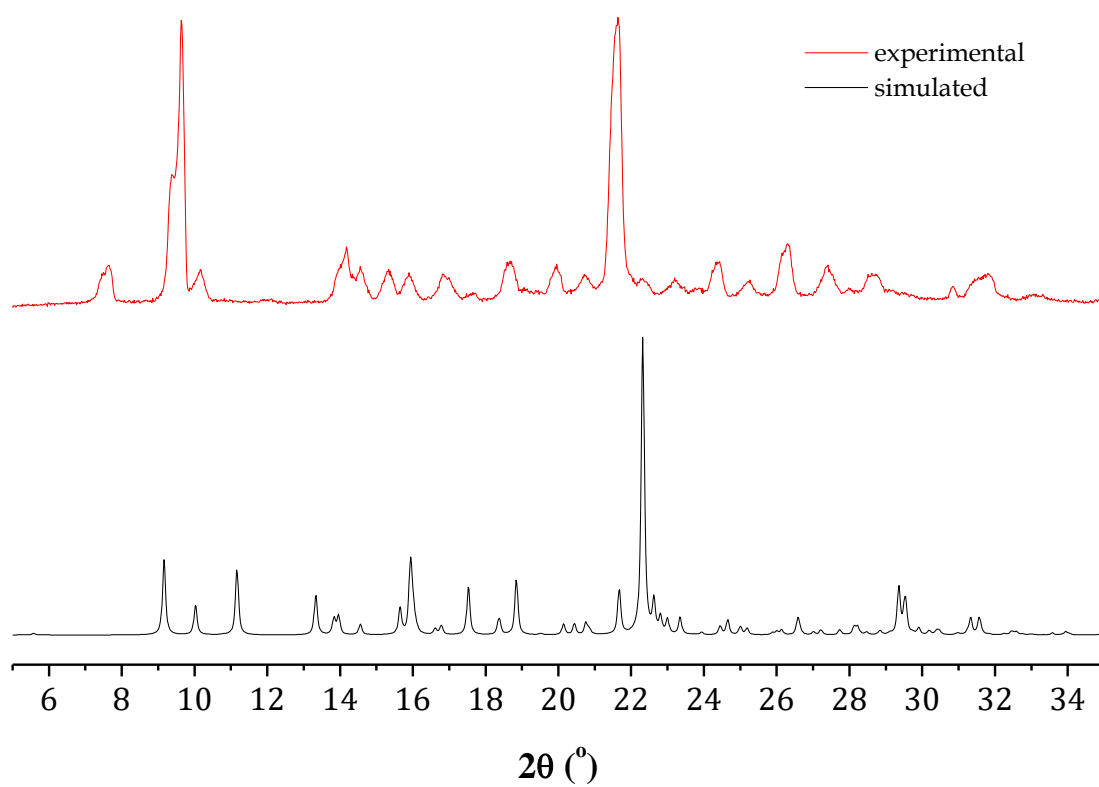


Figure S4. Measured (red) and calculated (black) powder X-ray diffraction patterns of **4**.

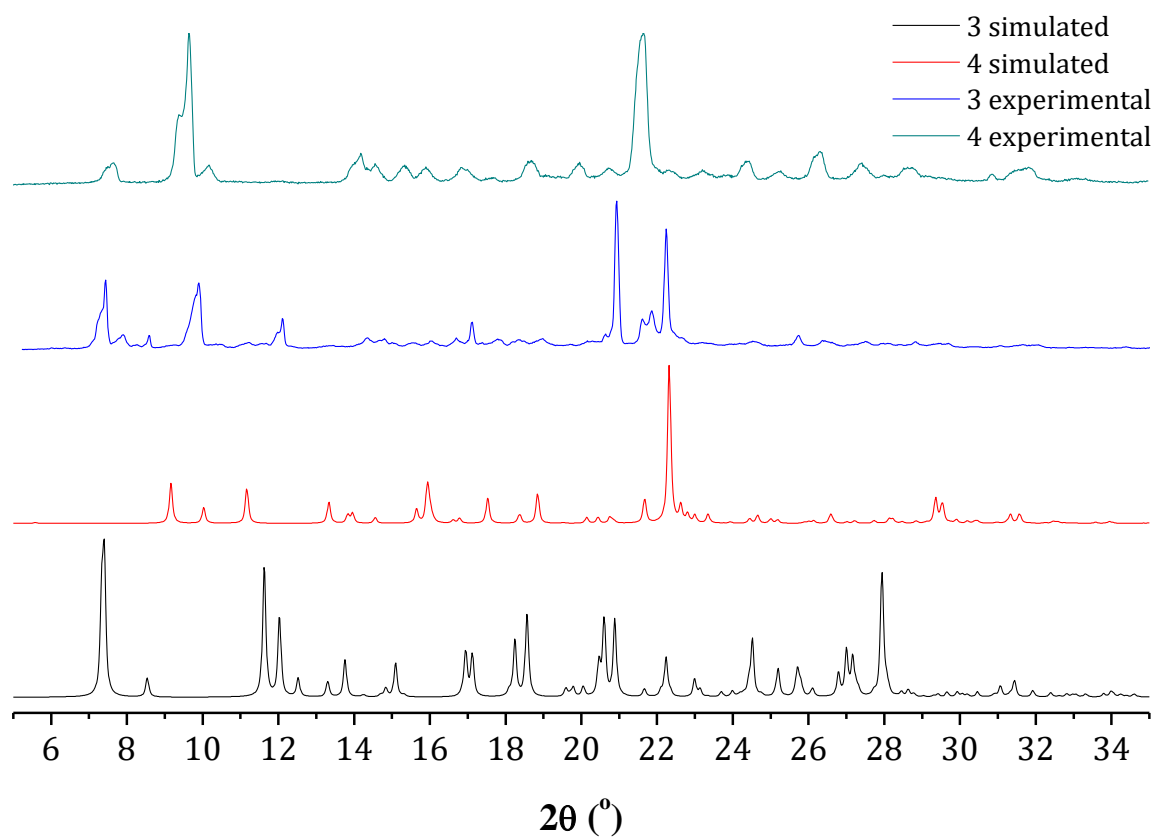


Figure S5. Comparison between powder X-ray diffraction patterns of **3** and **4**.

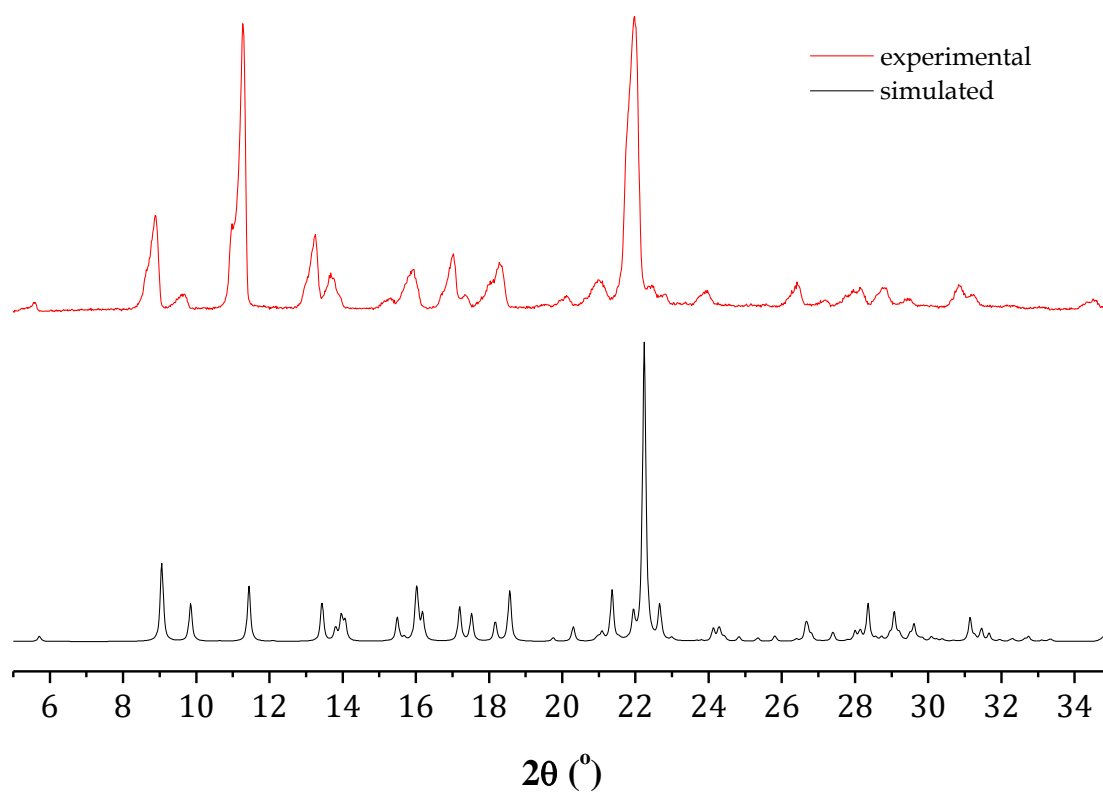


Figure S6. Measured (red) and calculated (black) powder X-ray diffraction patterns of **5**.

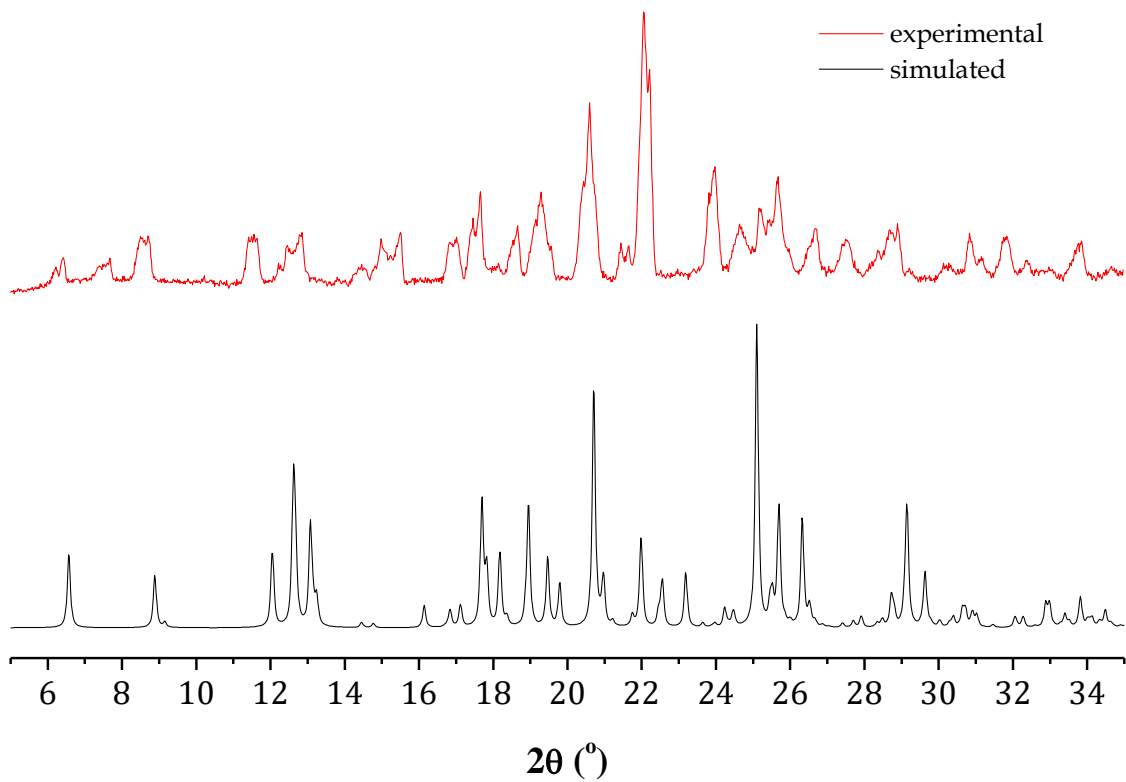


Figure S7. Measured (red) and calculated (black) powder X-ray diffraction patterns of **6**.

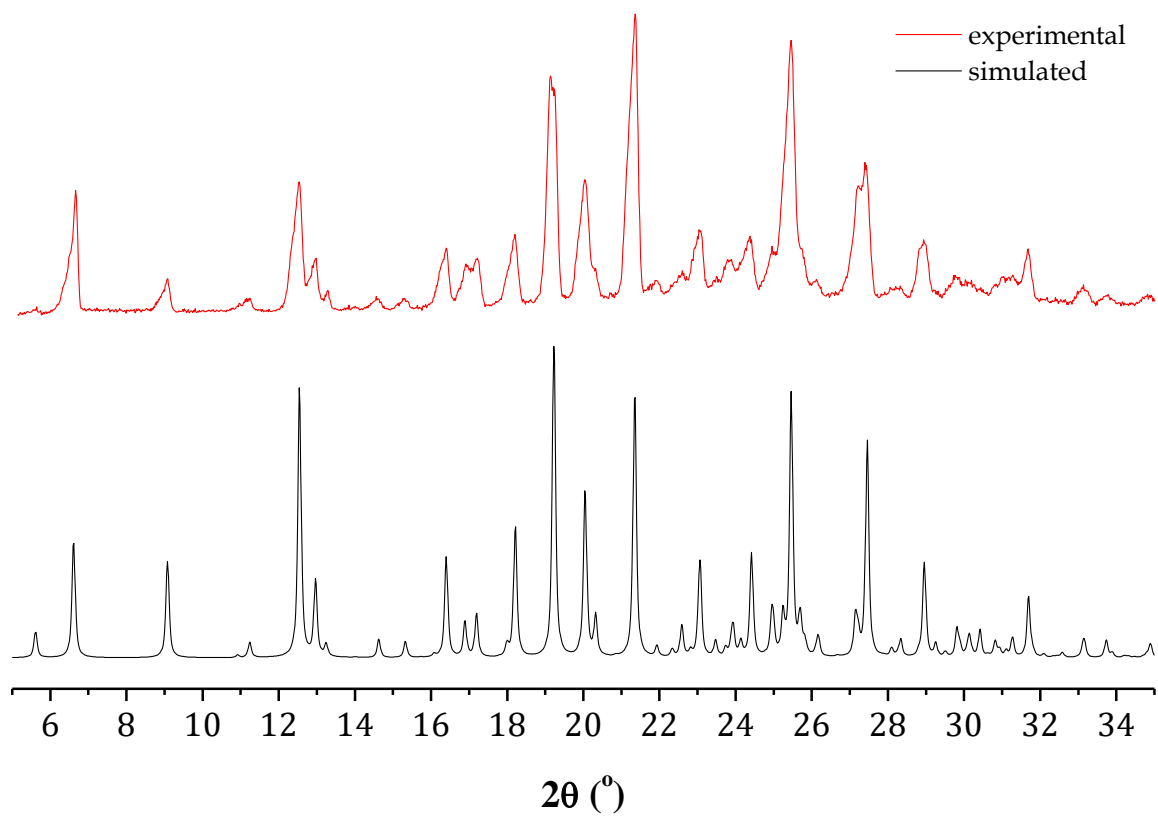


Figure S8. Measured (red) and calculated (black) powder X-ray diffraction patterns of **7**.

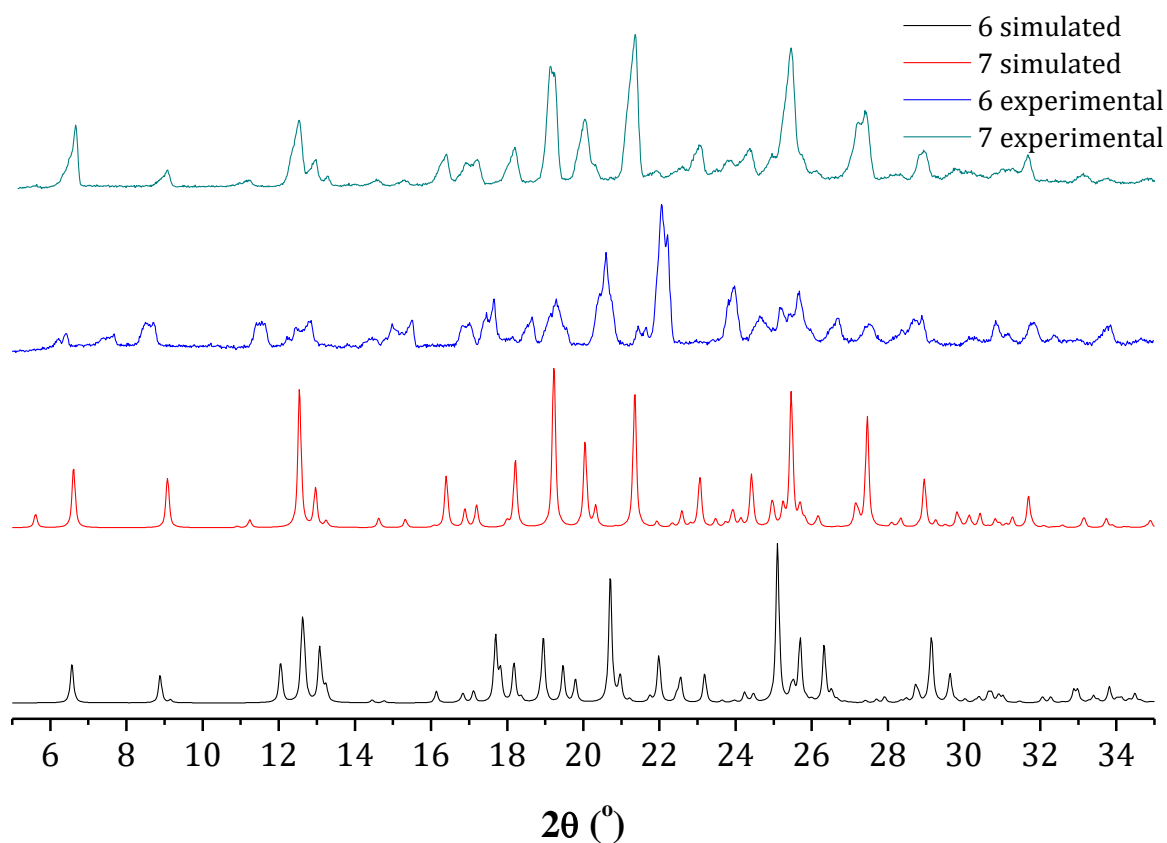


Figure S9. Comparison between powder X-ray diffraction patterns of **6** and **7**.

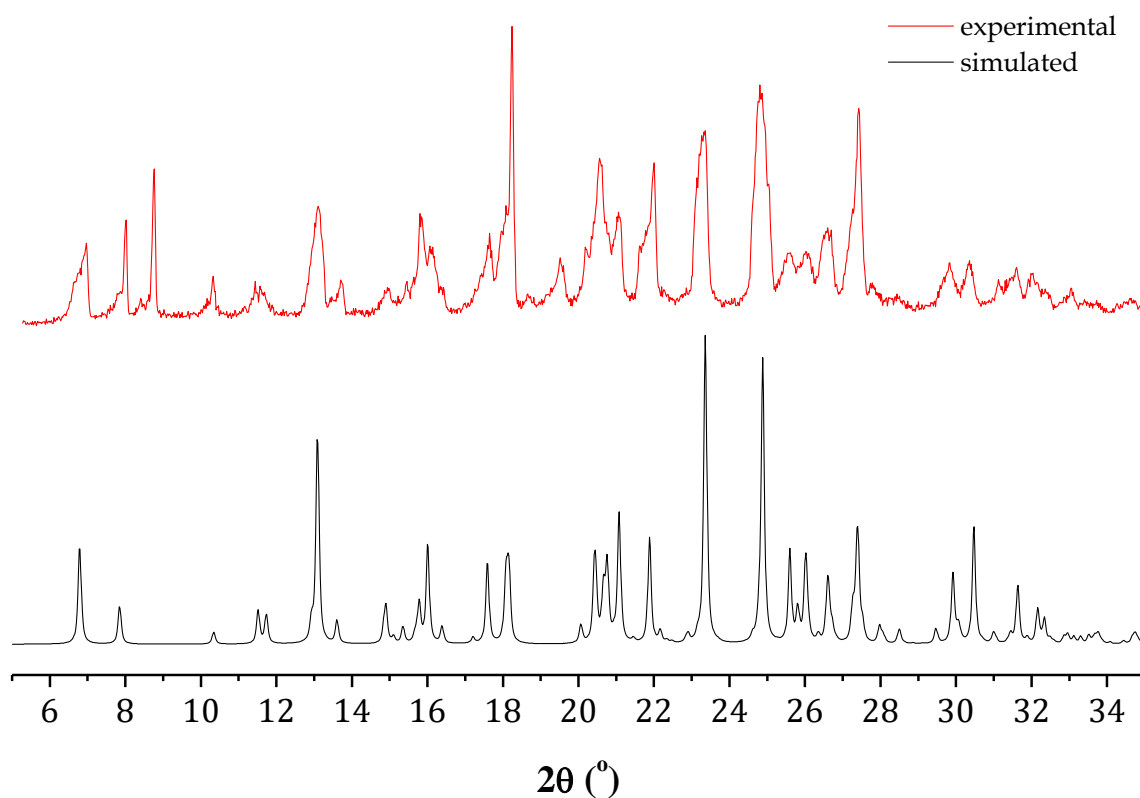


Figure S10. Measured (red) and calculated (black) powder X-ray diffraction patterns of **8**.

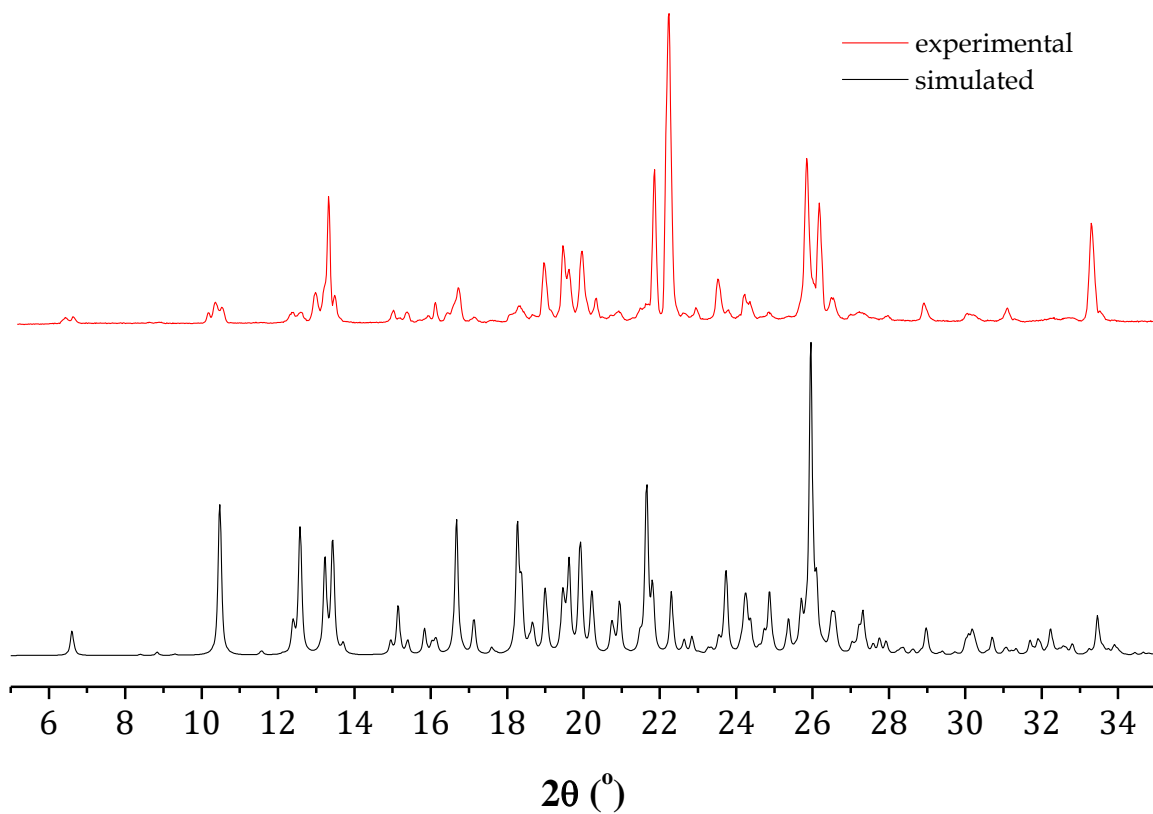


Figure S11. Measured (red) and calculated (black) powder X-ray diffraction patterns of **9**.

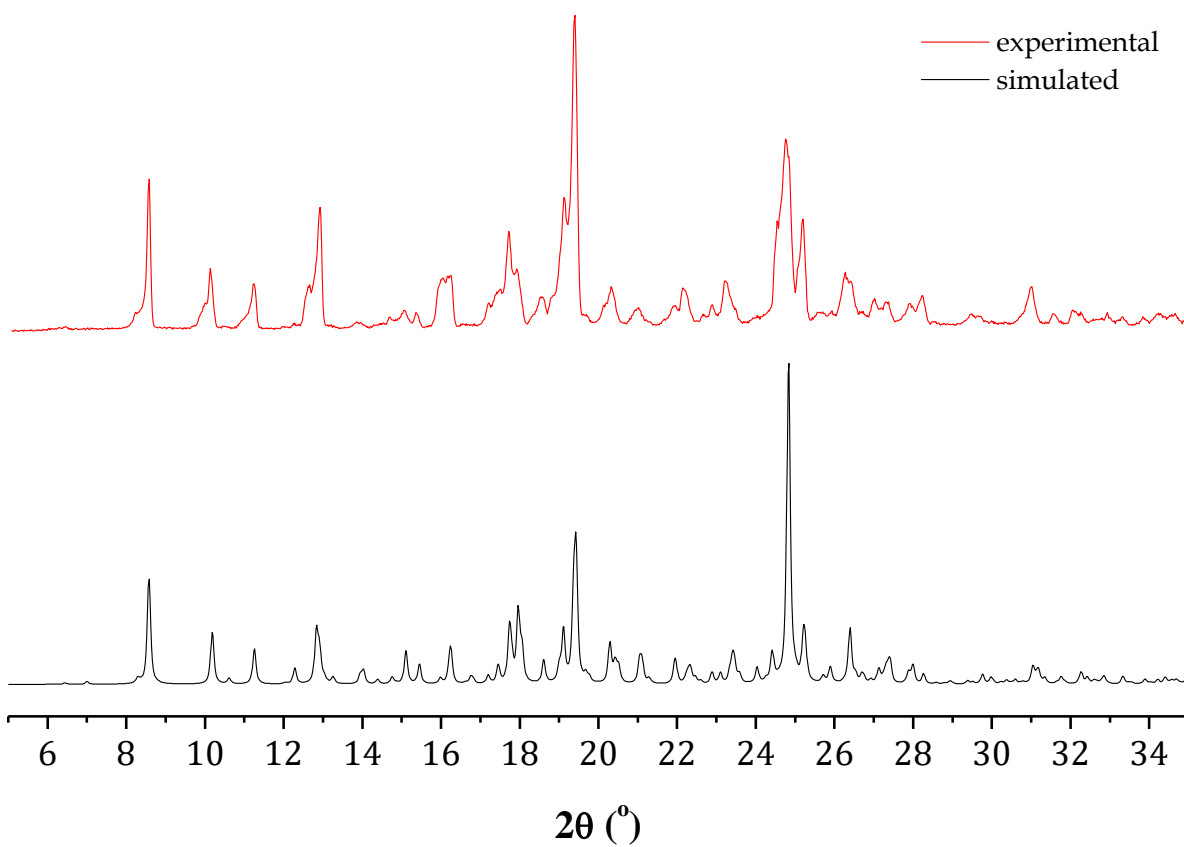


Figure S12. Measured (red) and calculated (black) powder X-ray diffraction patterns of **10**.

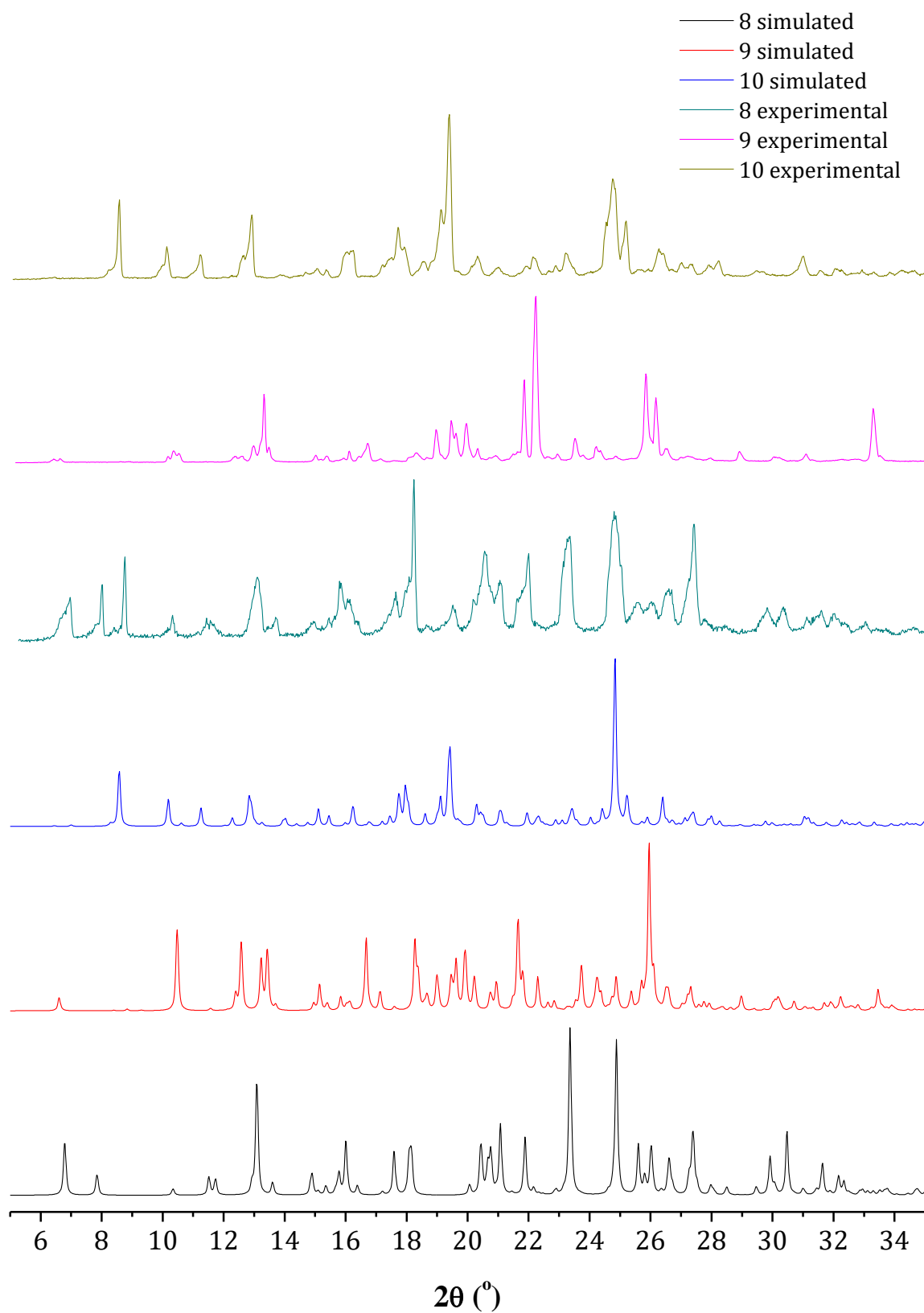


Figure S13. Comparison between powder X-ray diffraction patterns of **8**, **9** and **10**.