

**Table** Elemental analyses, MS data

Complex	M.P. [°C]	Yield [%]	Molecular formula	X						(m/z) Calc.	Mass spectra(m/z) (M+H <sup>+</sup> ), or (M+Na <sup>+</sup> )
				Elemental analyses [%]							
				Calculated			Found				
C	H	N	C	H	N						
<b>2</b>	218-219	98	C <sub>23</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub> Ni	66.86	4.40	6.78	66.9	4.18	6.67	412.08	413.1 <sup>a</sup>
<b>3</b>	227	45	C <sub>23</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub> Ni	64.37	4.24	6.53	64.28	4.37	6.37	428.08	429.1 <sup>a</sup>
<b>4</b>	276-277	48	C <sub>23</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub> Ni	64.37	4.24	6.53	64.26	4.41	6.31	428.08	429.1 <sup>a</sup>
<b>5</b>	105-107	90	C <sub>37</sub> H <sub>35</sub> N <sub>3</sub> O <sub>6</sub> Ni	65.70	5.22	6.21	65.79	5.37	6.03	675.19	676.2; 698.2 <sup>a</sup>
<b>6</b>	198-201	90	C <sub>28</sub> H <sub>25</sub> N <sub>3</sub> O <sub>5</sub> Ni	62.03	4.65	7.75	62.21	4.81	7.49	541.12	542.1; 564.1 <sup>a</sup>
<b>7</b>	129-132	60	C <sub>34</sub> H <sub>37</sub> N <sub>3</sub> O <sub>6</sub> Ni	63.47	5.95	6.53	63.62	5.92	6.53	641.20	642.3 <sup>a</sup>
<b>8</b>	107-110	70	C <sub>43</sub> H <sub>37</sub> N <sub>3</sub> O <sub>6</sub> Ni	68.82	4.97	5.60	69.01	5.41	6.10	749.20	750.1 <sup>a</sup>
<b>9</b>	99-103	80	C <sub>44</sub> H <sub>39</sub> N <sub>3</sub> O <sub>6</sub> Ni	69.13	5.14	5.50	69.29	5.55	6.07	763.22	786.3 <sup>b</sup>
<b>10</b>	145-148	60	C <sub>30</sub> H <sub>27</sub> N <sub>3</sub> O <sub>5</sub> Ni	63.41	4.79	7.39	63.59	4.91	7.81	567.13	568.0; 590.0 <sup>b</sup>
<b>11</b>	218-220	80	C <sub>29</sub> H <sub>26</sub> N <sub>4</sub> O <sub>6</sub> Ni	59.52	4.48	9.57	59.64	4.52	9.37	584.12	585.1; 606.9 <sup>b</sup>
<b>3D<sub>1</sub></b>	234-235	88	C <sub>44</sub> H <sub>30</sub> N <sub>2</sub> O <sub>8</sub> Ni	68.33	3.91	3.62	67.92	3.78	3.51	772.14	795.22 <sup>b</sup>
<b>3D<sub>2</sub></b>	89-91	89	C <sub>72</sub> H <sub>46</sub> N <sub>2</sub> O <sub>16</sub> Ni	68.97	3.70	2.23	68.53	3.62	2.18	1252.22	1253.98; 1275.94 <sup>b</sup>
<b>4D<sub>1</sub></b>	245-246	20	C <sub>44</sub> H <sub>30</sub> N <sub>2</sub> O <sub>8</sub> Ni	68.33	3.91	3.62	67.84	3.69	3.43	772.14	795.24 <sup>b</sup>
<b>4D<sub>2</sub></b>	85-86	15	C <sub>72</sub> H <sub>46</sub> N <sub>2</sub> O <sub>16</sub> Ni	68.97	3.70	2.23	68.39	3.55	2.19	1252.22	1275.18 <sup>b</sup>
<b>3D<sub>3</sub></b>	234-236	53	C <sub>44</sub> H <sub>35</sub> N <sub>2</sub> O <sub>5</sub> Ni	72.25	4.96	3.83	73.02	5.25	3.22	730.20	731.2 <sup>a</sup>
<b>3D<sub>4</sub></b>	65-66	38	C <sub>72</sub> H <sub>60</sub> N <sub>2</sub> O <sub>9</sub> Ni	74.81	5.23	2.42	73.82	4.90	2.24	1154.36	1155.5; 1177.4 <sup>a</sup>
<b>3D<sub>5</sub></b>	-	46	C <sub>128</sub> H <sub>108</sub> N <sub>2</sub> O <sub>17</sub> Ni	76.68	5.43	1.40	76.05	5.23	1.25	2002.70	2025.54 <sup>a</sup>
<b>4D<sub>3</sub></b>	137-136	92	C <sub>44</sub> H <sub>35</sub> N <sub>2</sub> O <sub>5</sub> Ni	72.25	4.96	3.83	73.73	5.18	3.38	730.20	731.2 <sup>a</sup>
<b>4D<sub>4</sub></b>	-	86	C <sub>72</sub> H <sub>60</sub> N <sub>2</sub> O <sub>9</sub> Ni	74.81	5.23	2.42	73.78	5.26	2.24	1154.36	1155.33; 1177.33 <sup>b</sup>
<b>4D<sub>5</sub></b>	-	81	C <sub>128</sub> H <sub>108</sub> N <sub>2</sub> O <sub>17</sub> Ni	76.68	5.43	1.40	76.12	5.06	1.34	2002.70	2025.78 <sup>b</sup>

<sup>a</sup> ESI-MS; <sup>b</sup> MALDI-TOF

<sup>1</sup> H NMR, CDCl <sub>3</sub> , δ (ppm)		
Schiff-base framework	O-substituents	
<b>2</b> 2.53 (s, 3H, -CH <sub>3</sub> ); 6.03 (s, 1H, -CH=); [6.64 (t, 1H, <i>J</i> = 7.3 Hz), 7.00 – 7.12 (m, 3H), 7.26 – 7.42 (m, 6H), 7.64 (dd, 1H, <i>J</i> <sub>o</sub> = 8.1 Hz, <i>J</i> <sub>m</sub> = 1.2 Hz), 7.88 (dd, 2H, <i>J</i> <sub>o</sub> = 7.8 Hz, <i>J</i> <sub>m</sub> = 1.7 Hz)] (13H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.19 (s, 1H, HC=N)	-	
<b>3</b> 2.45 (s, 3H, -CH <sub>3</sub> ); 5.98 (s, 1H, -CH=); [6.53 (t, 1H, <i>J</i> = 7.4 Hz), 6.85 (td, 2H, <i>J</i> <sub>o</sub> = 8.5 Hz, <i>J</i> <sub>d</sub> = 1.7 Hz), 7.00 (dtd, 2H, <i>J</i> <sub>o</sub> = 22.3 Hz, <i>J</i> <sub>t</sub> = 7.7 Hz, <i>J</i> <sub>d</sub> = 1.3 Hz), 7.25 (dd, 1H, <i>J</i> <sub>o</sub> = 8.25 Hz, <i>J</i> <sub>m</sub> = 1.1 Hz), 7.33-7.45 (m, 3H), 7.52 (dd, 1H, <i>J</i> <sub>o</sub> = 8.3 Hz, <i>J</i> <sub>m</sub> = 1.4 Hz), 7.79 (dt, 2H, <i>J</i> <sub>d</sub> = 6.3 Hz, <i>J</i> <sub>t</sub> = 1.7 Hz)] (12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 6.70 (s, 1H, OH); 8.09 (s, 1H, HC=N)	-	
<b>4<sup>a</sup></b> 2.53 (s, 3H, -CH <sub>3</sub> ); 6.22 (s, 1H, -CH=); [6.75 (m, 1H), 6.90 (m, 2H), 7.11 (dt, 2H, <i>J</i> <sub>d</sub> = 23.0 Hz, <i>J</i> <sub>t</sub> = 7.3 Hz), 7.43 – 7.52 (m, 4H), 7.84 (d, 2H, <i>J</i> = 7.1 Hz), 8.05 (d, 1H, <i>J</i> = 7.8 Hz)] (12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.61 (s, 1H, N=CH); 8.77 (s, 1H, OH);	-	
<b>5</b> 2.47 (s, 3H, -CH <sub>3</sub> ); 5.90 (s, 1H, -CH=); 6.56 (t, 1H, C <sub>6</sub> H <sub>3</sub> , <i>J</i> =8Hz); 6.95-7.67 (m, 17H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> -Phe, C <sub>6</sub> H <sub>5</sub> -complex); 8.18 (s, 1H, HC=N)	1.40 (s, 9H, d); 3.15 (dd, 1H, b, <i>J</i> <sub>ba</sub> =6Hz, <i>J</i> <sub>bb</sub> =13.5Hz); 3.42 (dd, 1H, b', <i>J</i> <sub>b'a</sub> =4.5Hz, <i>J</i> <sub>bb</sub> =13.5Hz); 4.85 (m, 1H, a); 5.18 (d, 1H, c, <i>J</i> <sub>ca</sub> =7Hz);	
<b>6</b> 2.47 (s, 3H, -CH <sub>3</sub> ); 5.88 (s, 1H, -CH=); 6.56 (t, 1H, C <sub>6</sub> H <sub>3</sub> , <i>J</i> =8Hz); 6.97-7.68 (m, 12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.15 (s, 1H, HC=N);	1.52 (d, 3H, b, <i>J</i> <sub>ab</sub> =7Hz); 1.75 (s, 3H, d); 4.91 (qn, 1H, a, <i>J</i> <sub>ab</sub> = <i>J</i> <sub>ac</sub> =7Hz); 6.48 (d, 1H, c, <i>J</i> <sub>ac</sub> =7);	
<b>7</b> 2.51 (s, 3H, -CH <sub>3</sub> ); 6.01 (s, 1H, -CH=); 6.99-7.86 (m, 12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.11 (s, 1H, HC=N);	1.02 (d, 6H, d, <i>J</i> <sub>dc</sub> =6Hz); 1.47 (s, 9H, f); 1.63 (m, 1H, c); 1.81 (s, 2H, b); 4.51 (m, 1H, a); 4.95 (d, 1H, e, <i>J</i> <sub>ae</sub> =8Hz);	
<b>8</b> 2.51 (s, 3H, -CH <sub>3</sub> ); 6.02 (s, 1H, -CH=); 6.99-7.86 (m, 20H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , C <sub>12</sub> H <sub>8</sub> -Fmoc); 8.10 (s, 1H, HC=N);	1.05 (d, 3H, c, <i>J</i> <sub>bc</sub> =6.5Hz); 1.09 (d, 3H, c', <i>J</i> <sub>bc'</sub> =6.5Hz); 1.55 (m, 1H, b); 4.26 (m, 1H, f); 4.45 (m, 2H, e); 4.51 (m, 1H, a); 5.35 (d, 1H, d, <i>J</i> <sub>ad</sub> =9Hz);	
<b>9</b> 2.51 (s, 3H, -CH <sub>3</sub> ); 6.02 (s, 1H, -CH=); 6.99-7.86 (m, 20H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , C <sub>12</sub> H <sub>8</sub> -Fmoc); 8.10 (s, 1H, HC=N);	1.00-1.57 (m, 8H, b, c, d, e); 4.26 (t, 1H, h, <i>J</i> <sub>gh</sub> =7Hz); 4.44 (m, 1H, g); 4.54 (m, 2H, a, g); 5.36 (d, 1H, f, <i>J</i> <sub>af</sub> =9Hz);	
<b>10</b> 2.50 (s, 3H, -CH <sub>3</sub> ); 6.01 (s, 1H, -CH=); 6.99-7.86 (m, 12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.11 (s, 1H, HC=N);	2.10 (s, 0.1H, e-cis); 2.13 (s, 0.9, e-trans); 2.15-2.22 (m, 3H, b, c); 2.33 (m, 1H, b'); 3.57 (m, 1H, d); 3.69 (m, 1H, d'); 4.57 (dd, 0.1H, a-cis, <i>J</i> <sub>a-cis,b</sub> =3Hz, <i>J</i> <sub>a-cis,b'</sub> =8.5Hz); 4.64 (dd, 0.9H, a-trans, <i>J</i> <sub>a-trans,b</sub> =4Hz, <i>J</i> <sub>a-trans,b'</sub> =8.5Hz);	
<b>11</b> 2.54 (s, 3H, -CH <sub>3</sub> ); 6.24 (s, 1H, -CH=); 6.87-7.85 (m, 12H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.84 (s, 1H, HC=N);	1.88 (s, 3H, e); 3.76 (d, 2H, c, <i>J</i> <sub>cd</sub> =6Hz); 4.10 (d, 2H, a, <i>J</i> <sub>ab</sub> =6Hz); 8.15 (t, 1H, d, <i>J</i> <sub>cd</sub> =6Hz); 8.40 (t, 1H, b, <i>J</i> <sub>ab</sub> =6Hz);	
<b>3D<sub>1</sub></b> 2.4 (s, 3H, -CH <sub>3</sub> ); 5.9 (s, 1H, -CH=); 6.5 (t, <i>J</i> = 7.5 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 6.8 – 7.7 (m, 18H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 8.17 (m, 5H, -CH=N-, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> )	8.1 (d, <i>J</i> = 2 Hz, 2H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>3D<sub>2</sub></b> 2.44 (s, 3H, -CH <sub>3</sub> ); 5.9 (m, 1H, -CH=); 6.6 (m, 1H, C <sub>6</sub> H <sub>3</sub> ); 6.9 – 7.7 (m, 19H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 7.8 – 8.4 (m, 22H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , -CH=N-)	<i>b</i>	
<b>4D<sub>1</sub></b> 2.5 (s, 3H, -CH <sub>3</sub> ); 6.0 (s, 1H, -CH=); 6.5 (t, <i>J</i> = 7.5 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 7.0 – 7.85 (m, 19H, C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> , 8.14 – 8.20 (m, 4H)	7.98 (d, <i>J</i> = 2.2 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>4D<sub>2</sub></b> 2.5 (s, 3H, -CH <sub>3</sub> ); 6.0 (s, 1H, -CH=); 6.5 (t, <i>J</i> = 7.5 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 7.0 – 7.85 (36H, C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> , 8.15 – 8.20 (m, 4H)	7.9 (d, <i>J</i> = 2.2 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>3D<sub>3</sub></b> 2.5 (s, 3H, -CH <sub>3</sub> ); 6.02 (s, 1H, -CH=); 6.5 (t, <i>J</i> = 7.8 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 6.87 – 7.8 (m, 22H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , 8.19 (s, 1H, HC=N);	5.02 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )); 5.23 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 6.57 (t, <i>J</i> = 2 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 6.82 (d, <i>J</i> = 2 Hz, 2H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>3D<sub>4</sub></b> 2.47 (s, 3H, -CH <sub>3</sub> ); 6.0 (s, 1H, -CH=); 6.87, 6.98 (dd, <i>J</i> <sub>1</sub> = 1.4, <i>J</i> <sub>2</sub> = 7.4, 1H, td, <i>J</i> <sub>1</sub> = 1.4 Hz, <i>J</i> <sub>2</sub> = 8.2, 2H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 7.07 – 7.8 (m, 27H, C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> , 8.15 (s, 1H, -HC=N-);	4.96 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )), 4.98 (s, 8H, -CH <sub>2</sub> -( <i>c</i> )), 5.2 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 6.52 (m, 5H, C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 6.62 (d, 4H, <i>J</i> = 1.8 Hz, C <sub>6</sub> H <sub>3</sub> ); 6.82 (d, 2H, <i>J</i> = 1.9 Hz, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>3D<sub>5</sub></b> 2.5 (s, 3H, -CH <sub>3</sub> ); 6.0 (s, 1H, -CH=); 6.8 – 7.8 (m, 60H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ) 8.15 (s, 1H, -HC=N-)	4.96 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )); 4.98 (s, 8H, -CH <sub>2</sub> -( <i>c</i> )); 5.0 (s, 16H, -CH <sub>2</sub> -( <i>d</i> )); 5.2 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 6.5-6.6 (m, 13H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>4D<sub>3</sub></b> 2.5 (s, 3H, CH <sub>3</sub> ); 6.0 (s, 1H, -CH=); 6.7 – 7.8 (m, 25H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ) 8.05 (s, 1H, N=CH)	4.93 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 5.03 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )); <i>b</i>	4.93 (s, 2H, -CH <sub>2</sub> -( <i>c</i> )); 5.03 (s, 4H, -CH <sub>2</sub> -( <i>d</i> )); Hz, 1H, C
<b>4D<sub>4</sub></b> 2.46 (s, 3H, CH <sub>3</sub> ); 5.97 (s, 1H, -CH=); 6.7 – 7.8 (m, 32H, <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , 8.0 (s, 1H, N=CH)	4.90 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 4.95 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )); 5.0 (s, 8H, -CH <sub>2</sub> -( <i>c</i> )); 6.53 (t, <i>J</i> = 2.2 Hz, 1H, C <sub>6</sub> H <sub>3</sub> ); 6.56 (t, <i>J</i> = 2.2 Hz, 2H, C <sub>6</sub> H <sub>3</sub> ); 6.64 (d, <i>J</i> = 2.2 Hz, 2H, C <sub>6</sub> H <sub>3</sub> ); 6.66 (d, <i>J</i> = 2.4 Hz, 4H, C <sub>6</sub> H <sub>3</sub> ); <i>b</i>	
<b>4D<sub>5</sub></b> 2.5 (s <broad>, 3H, -CH <sub>3</sub> ), 6.0 (s <broad>, 1H, -CH=), 6.5 – 7.8 (m, 73H, C <sub>6</sub> H <sub>3</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , 8.0 (s <broad>, 1H, N=CH)	4.90 (s, 2H, -CH <sub>2</sub> -( <i>a</i> )); 4.95 (s, 4H, -CH <sub>2</sub> -( <i>b</i> )); 5.0 (m, 24H, -CH <sub>2</sub> -( <i>c</i> and <i>d</i> )); <i>b</i>	

<sup>a</sup> -in DMSO, <sup>b</sup> some signals obscured by that of Schiff base part (column 2)

$^{13}\text{C}$  NMR.  $\delta$  (ppm),  $\text{CDCl}_3$ 

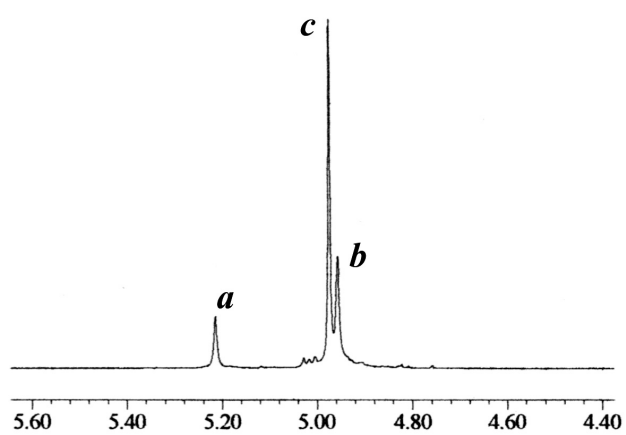
	Schiff-base framework	O-substituents
2	25.44 (-CH <sub>3</sub> ); 103.03 (-CH=); 114.66, 115.89, 120.34, 122.22, 123.85, 126.45, 127.73, 128.35, 130.71, 133.29, 135.02, 136.67, 142.96, 145.11; 153.18; 165.27 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> =C-N); 165.94 (C=N); 175.03 (C=O);	
3	25.42 (-CH <sub>3</sub> ); 103.08 (-CH=); 114.78, 115.05, 115.85, 118.92, 122.26, 123.18, 124.00, 126.59, 127.49, 128.48, 130.83, 136.37, 142.84, 145.20, 147.80; 153.37; 153.42 154.26 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> =C-N); 165.37 (C=N); 174.43 (C=O)	
4 <sup>a</sup>	24.79 (-CH <sub>3</sub> ); 101.90 (-CH=); 114.49, 115.55, 119.18, 120.66, 121.86, 123.76, 125.91, 126.34, 126.82, 128.22, 130.46, 135.88, 142.48, 143.51, 146.15, 154.06; 159.34 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> =C-N); 165.77 (C=N); 172.70 (C=O)	
5	24.93(-CH <sub>3</sub> ); 103.19(-CH=); 114.33, 114.73, 121.97, 123.65, 126.42, 126.64, 127.05, 128.11, 128.25, 129.79, 130.23, 130.99, 136.67, 141.91, 142.49, 145.15, 152.94, 157.05, 164.74 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> -Phe, C <sub>6</sub> H <sub>5</sub> , N-C=, C=N, C4); 175.37(C=O);	28.33(C6); 38.20(C3); 54.68(C2); 79.58(C5); 170.03(C1);
6	24.91(-CH <sub>3</sub> ); 103.63(-CH=); 114.50, 114.79, 121.77, 122.03, 123.90, 126.11, 126.69, 127.14, 128.14, 129.01, 130.48, 130.88, 136.94, 142.30, 142.52, 144.97, 153.04, 156.54, 165.02 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N); 169.48(C4); 175.47(C=O);	18.18(C3); 22.90(C5); 48.06(C2); 171.45(C1);
7	25.12(-CH <sub>3</sub> ); 102.88(-CH=); 114.46, 119.04, 122.00, 122.74, 122.92, 123.68, 126.50, 127.49, 128.12, 128.58, 130.52, 136.40, 139.64, 142.54, 145.01, 152.43, 163.91( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N, C6); 174.98(C=O);	21.97(C5); 22.87(C5 <sup>*</sup> ); 24.94(C4); 28.35(C8); 41.76(C3); 52.33(C2); 80.01(C7); 165.09(C1);
8	25.11(-CH <sub>3</sub> ); 102.91(-CH=); 114.47, 119.98, 121.99, 122.83, 122.93, 123.68, 125.05, 126.54, 127.10, 127.49, 127.73, 125.14, 130.54, 136.39, 141.33, 142.50, 143.87, 145.03, 152.38, 163.98 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N, C <sub>12</sub> H <sub>8</sub> -Fmoc, C5); 175.03(C=O);	17.80(C4); 19.06(C4 <sup>*</sup> ); 31.41(C3); 47.25(C7); 59.23(C2); 67.16(C6); 165.09(C1);
9	25.12(-CH <sub>3</sub> ); 102.91(-CH=); 114.48, 119.99, 122.82, 122.94, 123.68, 125.05, 126.54, 127.10, 127.49, 127.72, 128.14, 130.54, 136.39, 139.43, 141.34, 142.51, 143.78, 143.88, 145.04, 152.39; 163.97 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N, C <sub>12</sub> H <sub>8</sub> -Fmoc, C7); 175.04(C=O);	11.65(C6); 15.62(C4); 25.28(C5); 38.15(C3); 47.22(C9); 58.50(C2); 67.13(C8); 165.10(C1);
10	24.99,25.12(-CH <sub>3</sub> ;C4); 102.84(-CH=); 114.46, 119.10, 121.96, 122.55, 123.20, 123.73, 125.27, 126.41, 127.47, 128.09, 128.20, 128.70, 129.00, 130.47, 136.42, 139.77, 142.58, 144.96, 152.55, 163.82, 165.06( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N); 174.90(C=O);	22.21(C7); 29.47(C3); 47.80(C5); 58.84(C2); 169.50(C6); 171.49(C1);
11	24.93(-CH <sub>3</sub> ); 102.13(-CH=); 115.70, 119.23, 121.11, 122.02, 123.90, 126.57, 128.22, 128.87, 130.55, 135.86, 138.74, 142.03, 143.74, 154.79, 162.43, 166.02( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , N-C=, C=N); 172.84(C=O);	22.35(C6); 40.80(C4); 41.68(C2); 168.98, 169.48, 169.74(C1,C3,C5);
3D <sub>1</sub>	25.17 (-CH <sub>3</sub> ); 102.36 (-CH=C); 114.12, 114.72, 123.47, 125.84, 142.20, 142.35, 145.14 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 126.47, 127.06, 127.97, 128.62, 130.23, 133.82 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> ); 120.77, 120.94, 121.97, 129.01, 131.15, 132.29, 135.84, 151.43, 152.71, 162.81 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , 157.059 (C=N); 173.92 (C=O)	164.75, 164.38 (C=O);
3D <sub>2</sub>	(-CH <sub>3</sub> ); 102.43 (-CH=); 114.30, 114.58, 123.46, 142.43, 145.26 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 152.69 (C=N); 174.43 (C=O); 120.40, 120.82, 120.98, 121.07, 121.13, 121.22, 121.32, 121.42, 121.50, 121.71, 121.94, 126.08, 126.56, 127.08, 127.13, 128.04, 128.69, 128.90, 129.06, 130.31, 130.44, 130.56, 130.70, 131.20, 133.94, 134.02, 151.16, 151.44, 151.48, 151.57, 151.64, 151.76 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> )	162.78, 164.40, 164.47 (C=O);
4D <sub>1</sub>	25.13 (-CH <sub>3</sub> ); 102.89 (-CH=); 114.48, 114.58, 122.74, 122.81, 123.18, 123.22, 123.71, 142.56, 142.59, 145.02 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 152.53 (C=N); 174.98 (C=O); 119.18, 120.96, 121.06, 121.99, 126.50, 127.50, 128.13, 128.55, 128.71, 128.92, 129.05, 130.10, 130.30, 130.50, 133.47, 133.98, 136.43, 139.79, 151.53 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> )	163.97, 164.62, 165.08 (C=O); <sup>b</sup>
4D <sub>2</sub>	25.11 (-CH <sub>3</sub> ); 102.78 (-CH=); 114.39, 114.68, 122.89, 123.21, 123.75, 142.65, 142.71, 145.11 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 152.35 (C=N); 175.02 (C=O); 121.15, 122.03, 126.45, 127.53, 128.11, 128.34, 128.81, 128.95, 130.21, 130.47, 133.52, 134.01, 136.34, 140.05, 151.35 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> .)	163.98, 164.52, 165.15 (C=O); <sup>b</sup>
3D <sub>3</sub>	25.16 (CH <sub>3</sub> ); 102.39 (-CH=); 114.357, 114.926, 120.866, 121.911, 123.474 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> ); 119.696, 126.08, 126.12, 127.42, 127.57, 127.80, 127.93, 128.15, 128.44, 130.52, 136.09, 137.04, 140.685, 142.695, 145.071, 150.160, 152.767, 164.88 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> .); 158.33 (C=N); 174.56 (C=O)	70.11( <sup>b</sup> ), 71.83( <sup>a</sup> ) (-CH <sub>2</sub> -); 101.72, 106.56, 160.04 (C <sub>6</sub> H <sub>3</sub> ); <sup>b</sup>
3D <sub>4</sub>	25.13 (-CH <sub>3</sub> ); 102.40 (-CH=); 114.358, 114.935, 119.00, 119.27, 119.34, 120.796, 121.91, 123.47 (C <sub>6</sub> H <sub>3</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> ); 174.54 (C=O); 125.09, 125.99, 126.18, 127.42, 127.56, 127.91, 128.20, 128.52, 130.58, 136.90, 139.48, 140.68, 142.68, 145.04, 145.25, 150.19, 152.77, 159.94, 160.11, 164.90 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , C=N)	70.01( <sup>b</sup> ), 70.09( <sup>c</sup> ), 71.69( <sup>a</sup> ) (-CH <sub>2</sub> -); 101.73, 106.52, 106.41 (C <sub>6</sub> H <sub>3</sub> ); <sup>b</sup>
3D <sub>5</sub>	25.15 (-CH <sub>3</sub> ); 101.68, 106.53, 106.34, 127.49, 127.96, 128.11, 128.58, 136.79, 139.30, 160.05, 160.21 ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , C=N)	70.01, 70.11, 71.70 (-CH <sub>2</sub> -); <sup>b</sup>
4D <sub>3</sub>	25.16 (-CH <sub>3</sub> ); 102.74 (-CH=); 113.11, 114.38, 118.71, 121.92, 123.00, 148.71 (C <sub>6</sub> H <sub>3</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> ); 174.86 (C=O); 123.55, 125.29, 125.94, 126.93, 127.52, 127.97, 128.09, 128.21, 128.57, 129.02, 130.43, 136.55, 136.87, 139.81, 142.85, 144.76, 152.08, 160.19, 162.11, 164.93 (C <sub>6</sub> H <sub>3</sub> , C <sub>6</sub> H <sub>5</sub> , C=N.)	70.15( <sup>b</sup> ), 70.82( <sup>a</sup> ) (-CH <sub>2</sub> -); 101.60, 106.35 (C <sub>6</sub> H <sub>3</sub> ); <sup>b</sup>
4D <sub>4</sub>	25.13 (-CH <sub>3</sub> ); 102.69 (-CH=); 113.16, 114.41, 118.71, 121.85, 122.90, 123.53, 148.623, ( <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C <sub>6</sub> H <sub>3</sub> ); 174.738 (C=O); 125.874, 130.382, 136.525, 139.809, 142.775, 144.672, 152.055, 161.978, 126.77, 127.35, 127.50, 127.67, 127.93, 128.07, 128.33, 128.53, 136.81, 139.29, 160.04, 160.18, 164.874 (C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , C=N.)	69.98( <sup>b</sup> ), 70.12( <sup>c</sup> ), 70.72( <sup>a</sup> ) (-CH <sub>2</sub> -); 101.614, 106.28, 106.41 (C <sub>6</sub> H <sub>3</sub> ); <sup>b</sup>
4D <sub>5</sub>	25.12 (-CH <sub>3</sub> ); 101.70, 106.32, 106.44, 127.50, 127.94, 128.09, 128.54, 136.84, 139.27, 160.09, 160.19 (C <sub>6</sub> H <sub>5</sub> , C <sub>6</sub> H <sub>3</sub> , <i>o</i> -C <sub>6</sub> H <sub>4</sub> , C=N)	70.04, 70.13, 70.81( <sup>a</sup> ) (-CH <sub>2</sub> -); <sup>b</sup>

<sup>a</sup> -in DMSO, <sup>b</sup> some signals obscured by that of Schiff base part (column 2)

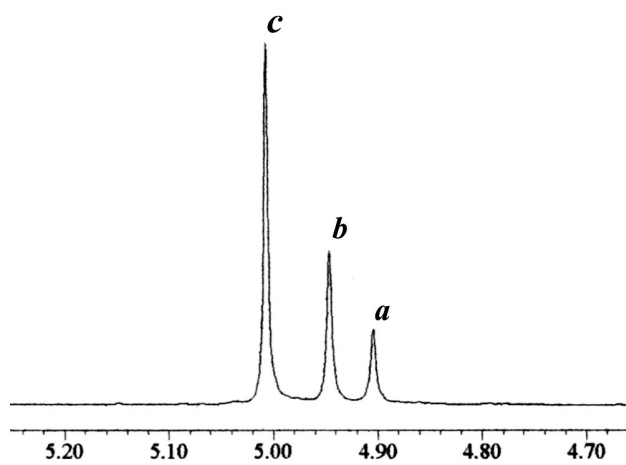
**Table . IR data**

Complex	$\nu$ (cm <sup>-1</sup> )
<b>2</b>	1608 (v C=O);
<b>3</b>	3405 (v O-H); 1610 (v C=O);
<b>4</b>	3110b (v O-H); 1610 (v C=O);
<b>5</b>	3395b (v N-H); 1748 (v C=O ester); 1668 (v C=O amide); 1613 (v C=O);
<b>6</b>	3404b (v N-H); 1751 (v C=O ester); 1662 (v C=O amide); 1614 (v C=O)
<b>7</b>	3430b (v N-H); 1761 (v C=O ester ); 1712 (v C=O amide);
<b>8</b>	3412b (v N-H); 1756 (v C=O ester); 1721 (v C=O amide); 1620 (v C=O);
<b>9</b>	3415b (v N-H); 1755 (v C=O ester); 1718 (v C=O amide); 1620 (v C=O);
<b>10</b>	3445b (v N-H); 1759 (v C=O ester); 1646b (v C=O amide);
<b>11</b>	3408 (v N-H); 1766 (v C=O ester); 1654b (v C=O amide);
<b>3D<sub>1</sub><sup>b</sup></b>	1715 (v C=O ester)
<b>3D<sub>2</sub><sup>b</sup></b>	1713 (v C=O ester)
<b>4D<sub>1</sub><sup>b</sup></b>	1716 (v C=O ester)
<b>4D<sub>2</sub><sup>b</sup></b>	1720 (v C=O ester)
<b>3D<sub>3</sub><sup>b</sup></b>	3029, 3058 (v C-H arom.); 2925 (v C-H aliph.); 1607 (v C=O);
<b>3D<sub>4</sub><sup>b</sup></b>	3032, 3063, 3089 (v C-H arom.); 2926 (v C-H aliph.); 1609 (v C=O);
<b>3D<sub>5</sub><sup>b</sup></b>	3035, 3060, 3090 (v C-H arom.); 2920-2930 (v C-H aliph.);
<b>4D<sub>3</sub><sup>b</sup></b>	3035, 3058 (v C-H arom.); 2920 (v C-H aliph.);
<b>4D<sub>4</sub><sup>b</sup></b>	3030, 3060, 3090 (v C-H arom.); 2920-2930 (v C-H aliph.);
<b>4D<sub>5</sub><sup>b</sup></b>	3034, 3066, 3085 (v C-H arom.); 2920-2930 (v C-H aliph.);

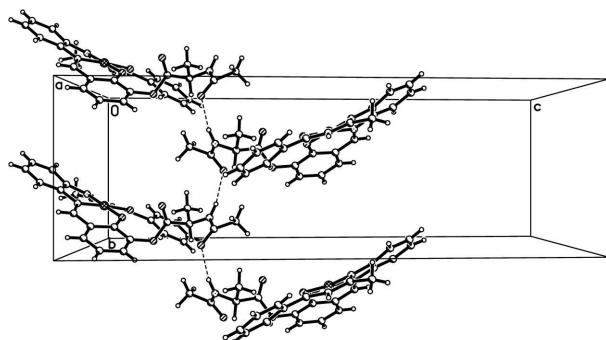
<sup>a</sup> in KBr , <sup>b</sup> in hexachlorobutadiene



$^1\text{H}$  NMR spectrum of  $3\text{D}_4$  showing signals of methylene groups.



$^1\text{H}$  NMR spectrum of  $4\text{D}_4$  showing signals of methylene groups.



Packing diagram of the **6** complex viewed along the *a* axis. Hydrogen bonds are shown by dashed lines. The intermolecular N-H...O hydrogen bonds link molecules into infinite homochiral chains extending along *b* axis.