

#### Terms & Conditions

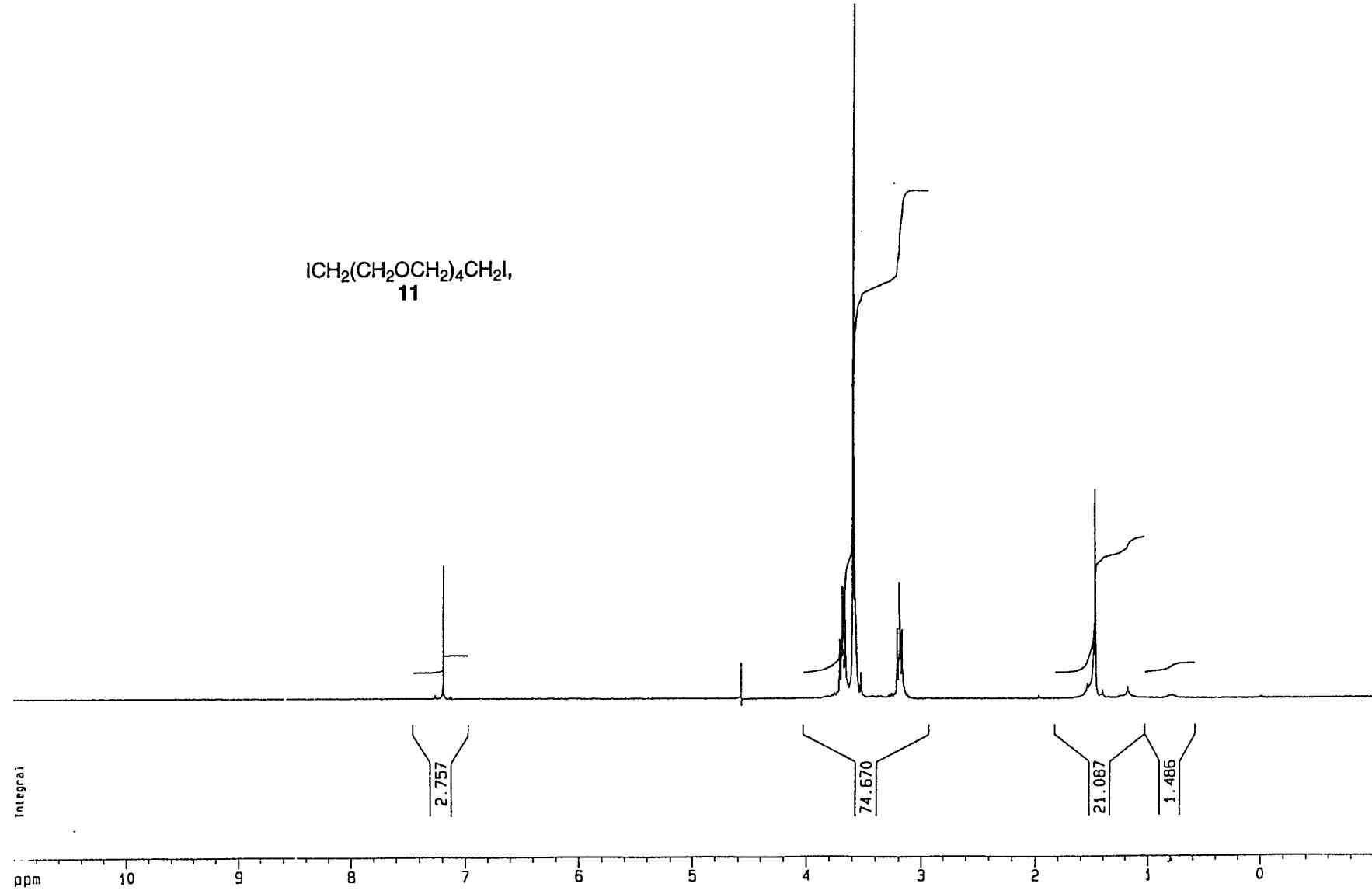
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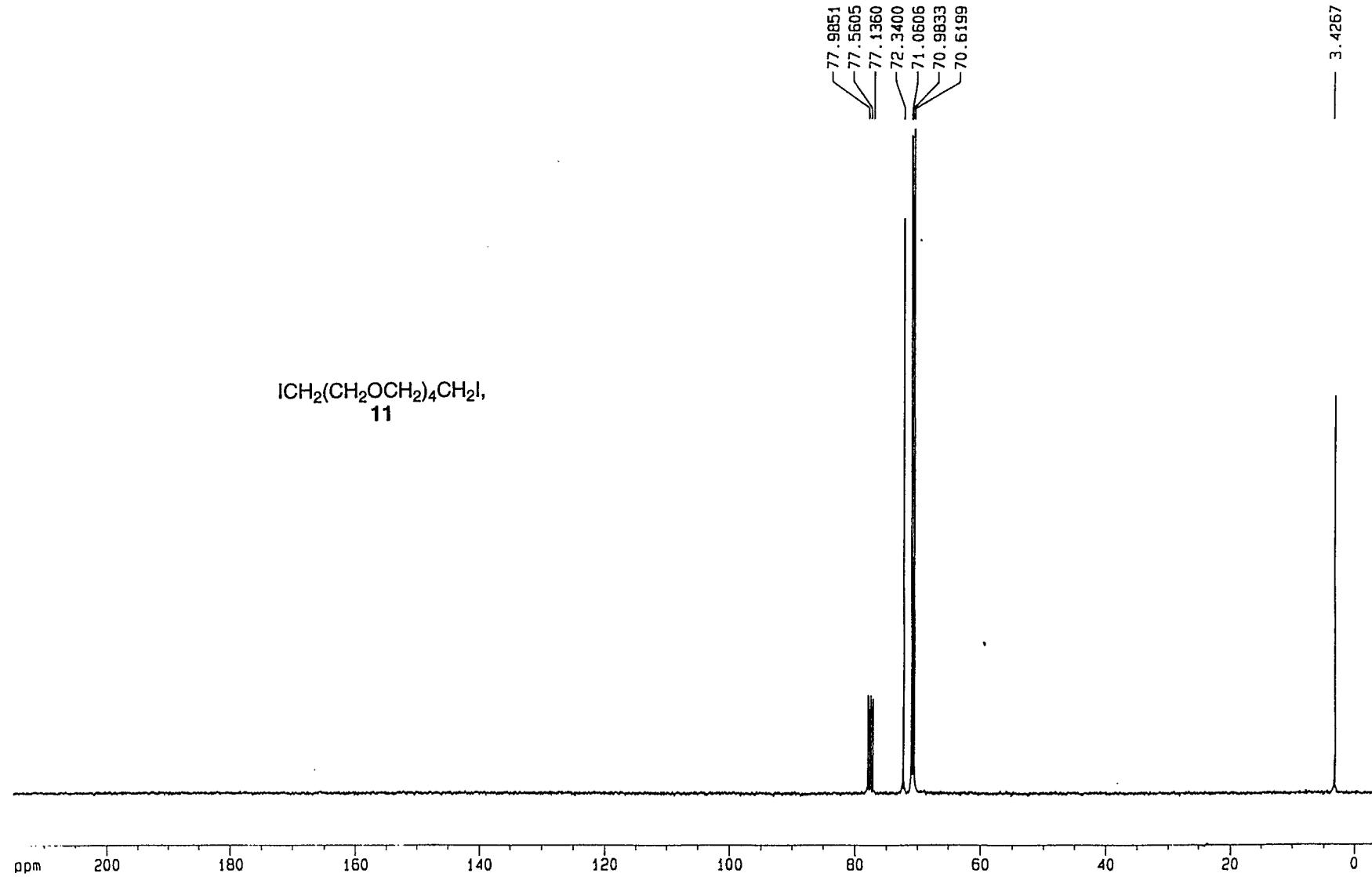


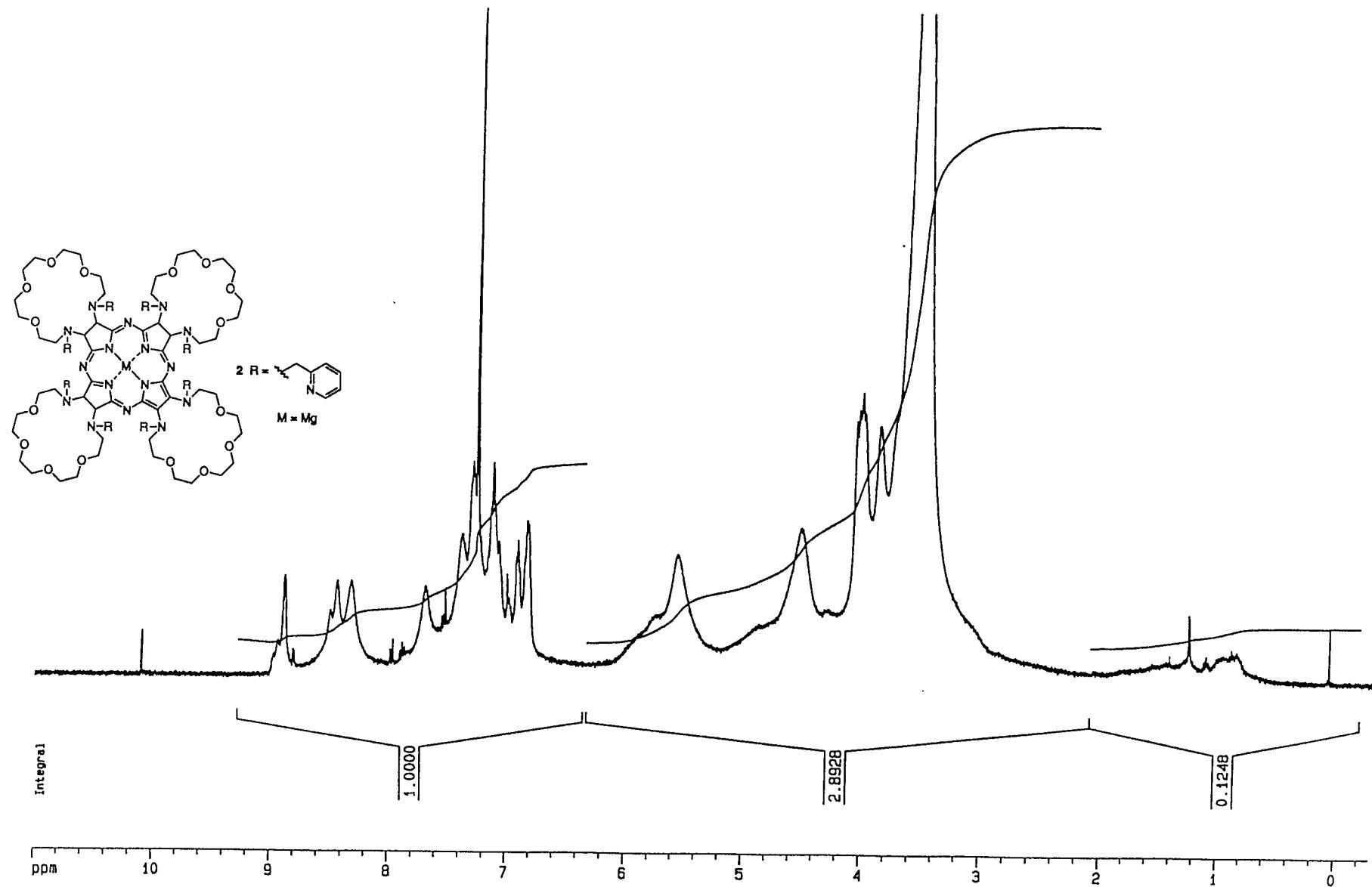
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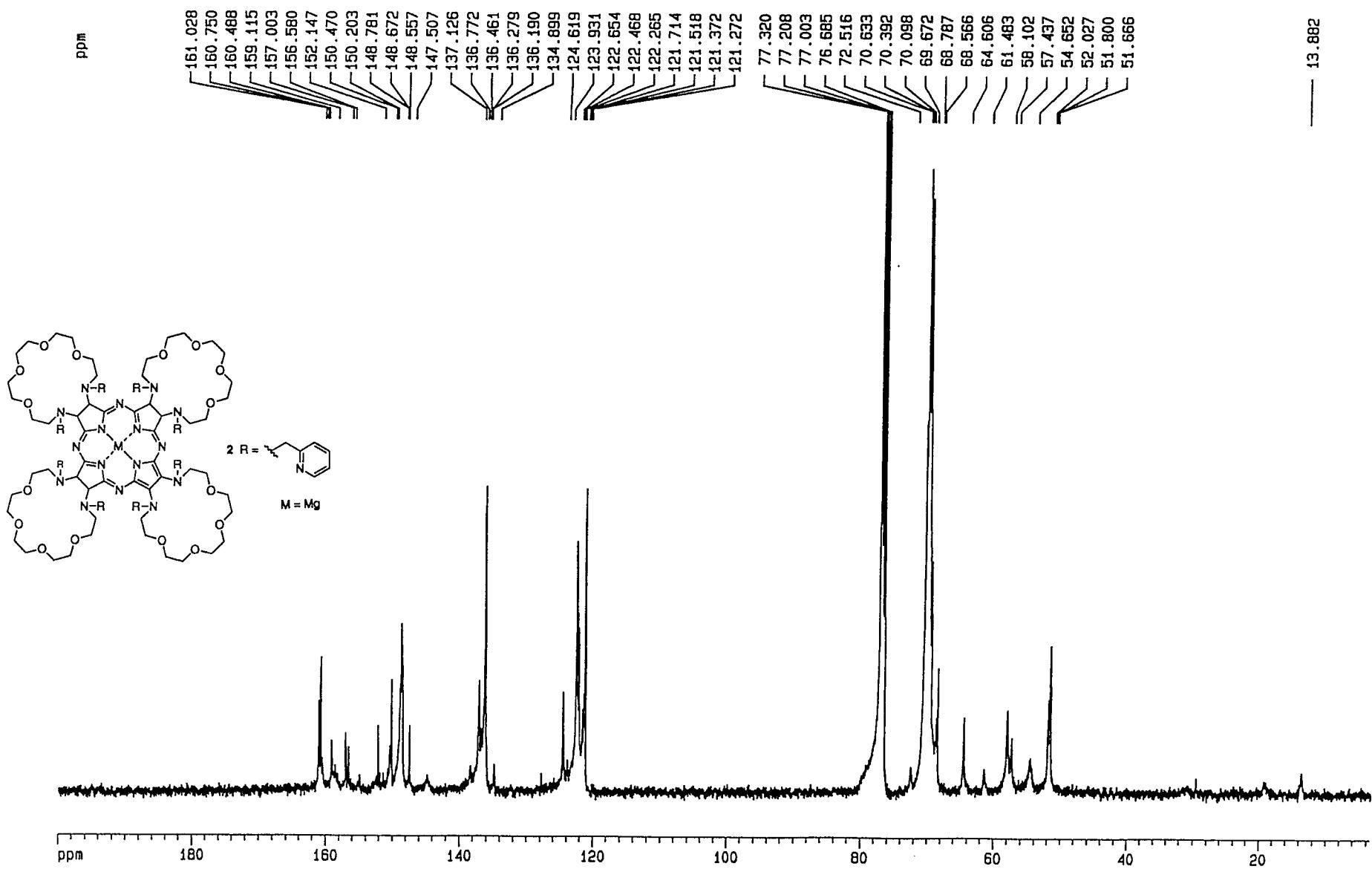
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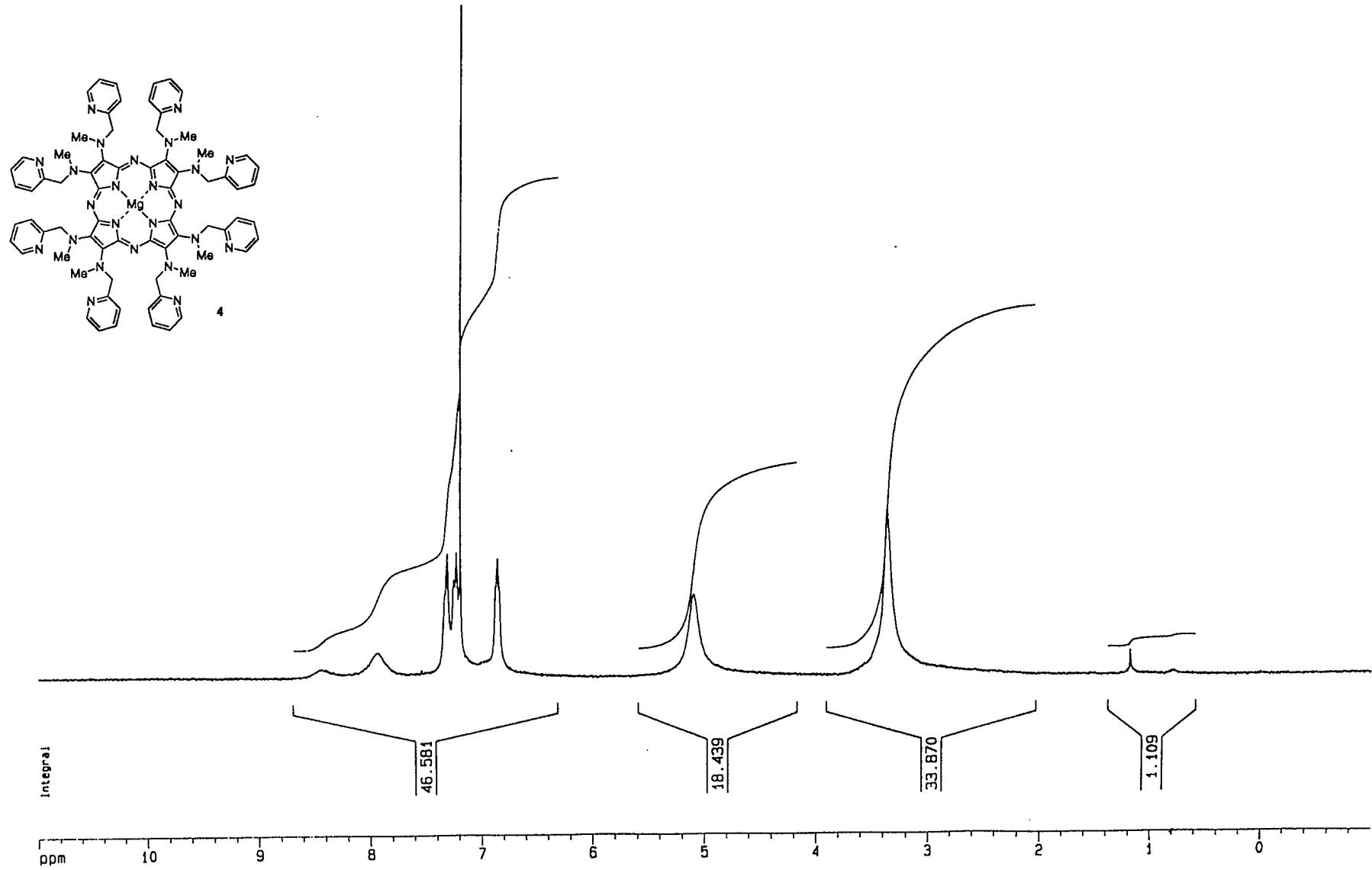
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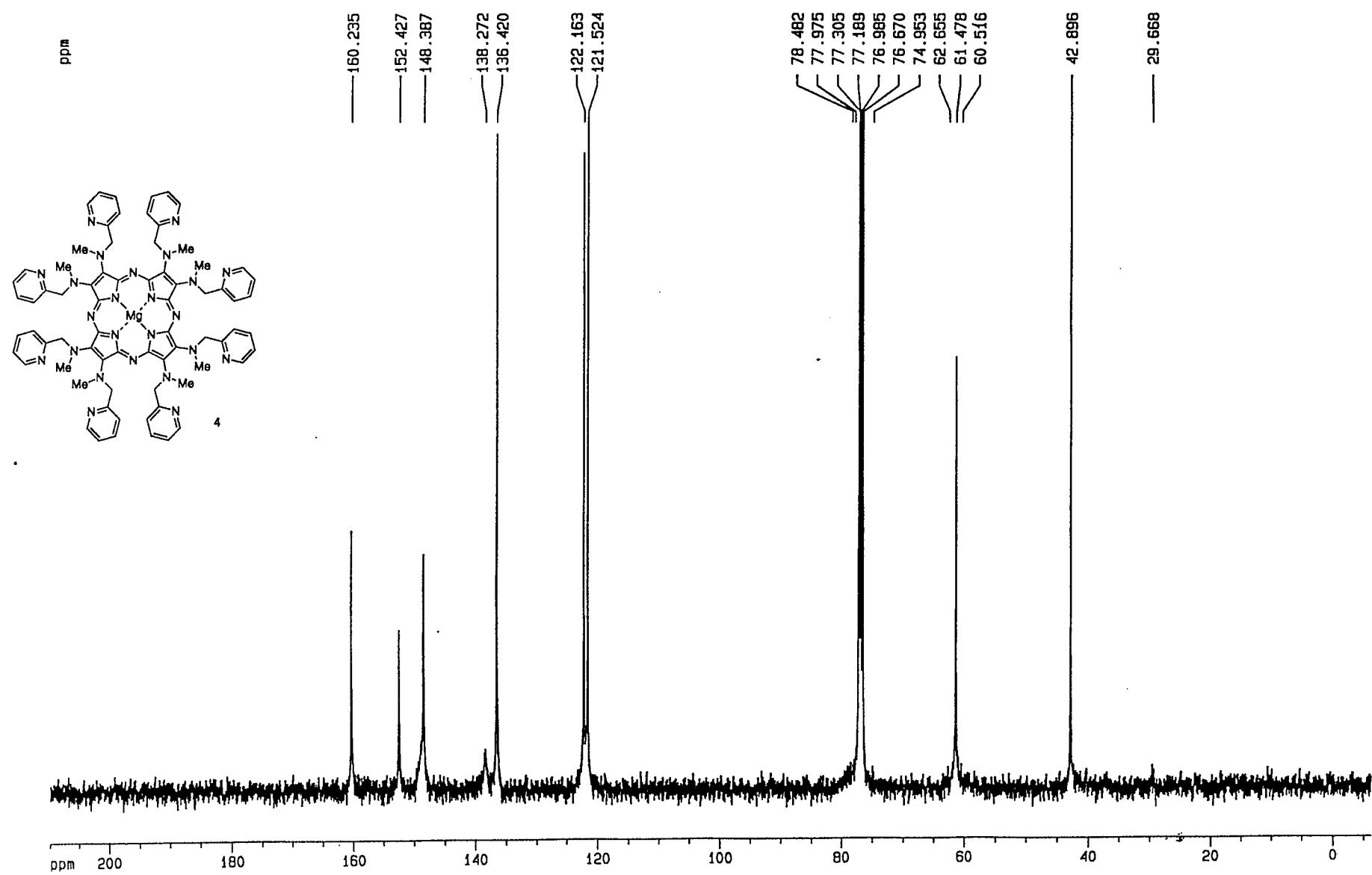


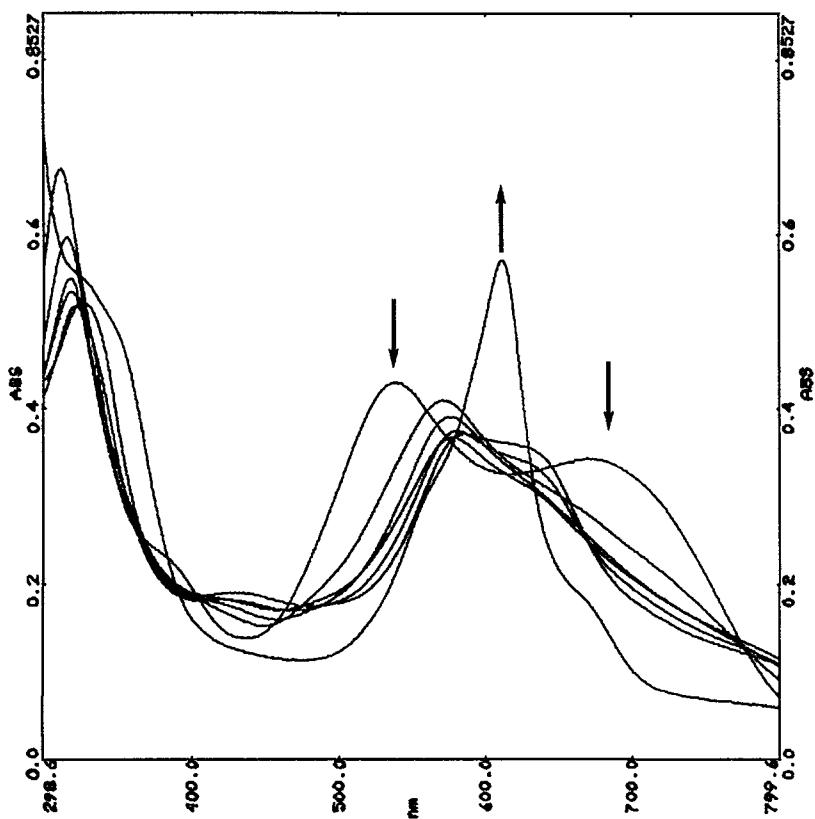




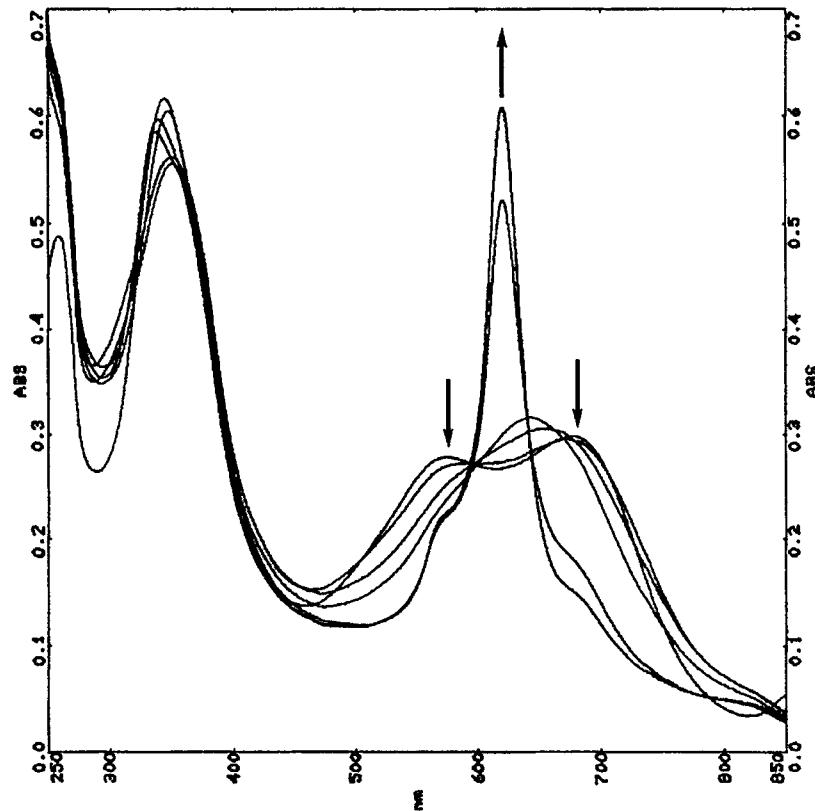








**Figure 1:** Porphyrazine 1 ( $M = \text{Ni}$ ) titrated with  $\text{Hg}(\text{ClO}_4)_2$  (0, 2, 4, 8, 20, 40, >100 equiv).



**Figure 2:** Porphyrazine 2 titrated with  $\text{AgBF}_4$  (0, 1, 2, 3, 4, 6 equiv).

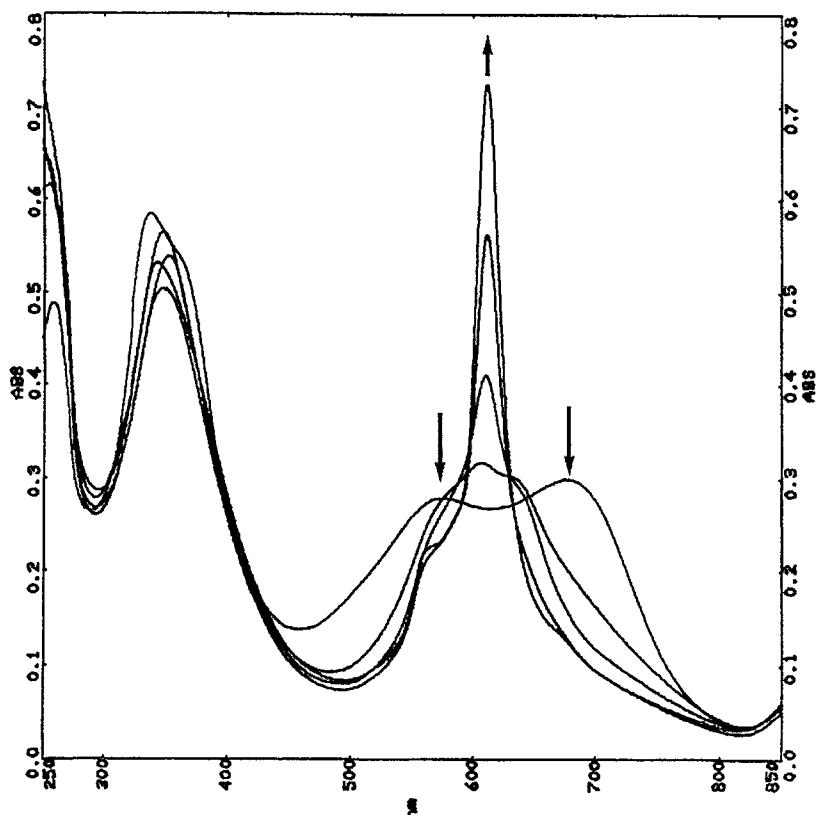


Figure 3: Porphyrazine 2 titrated with  $\text{Pb}(\text{NO}_3)_2$  (0, 2, 4, 6, 8 equiv).

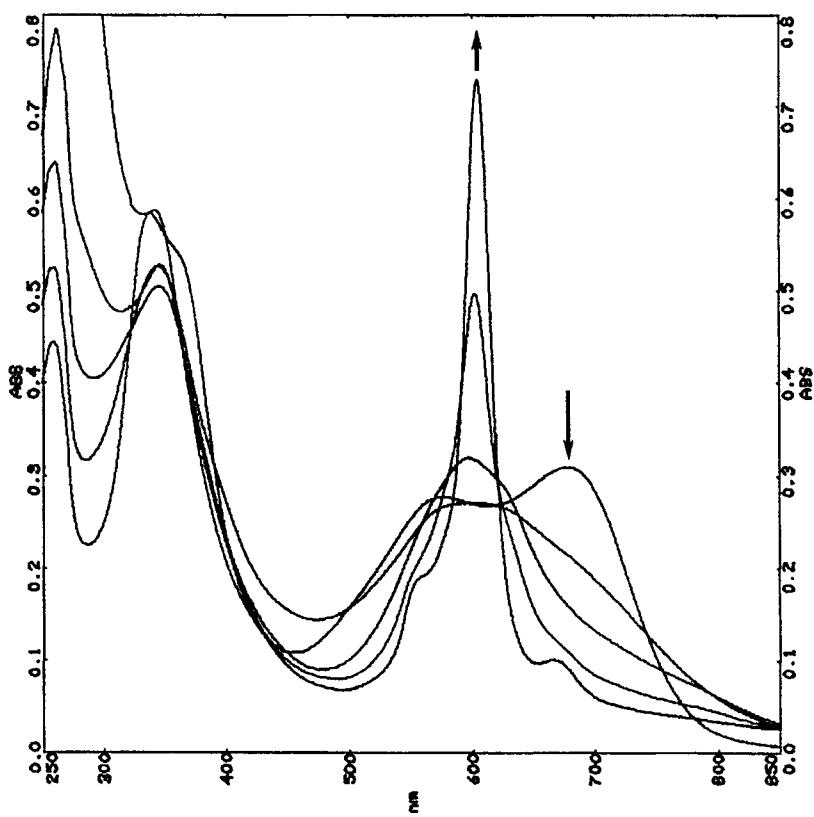


Figure 4: Porphyrazine 2 titrated with  $\text{CuCl}_2$  (0, 2, 4, 8, 20 equiv).

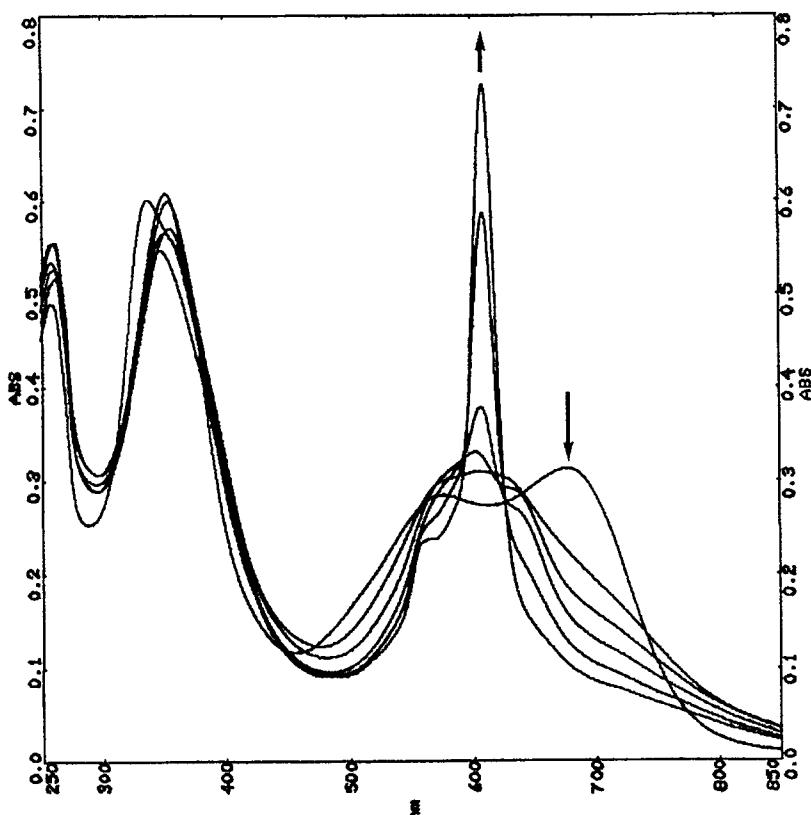


Figure 5: Porphyrazine 2 titrated with  $\text{CoCl}_2$  (0, 2, 4, 8, 20, 40 equiv).

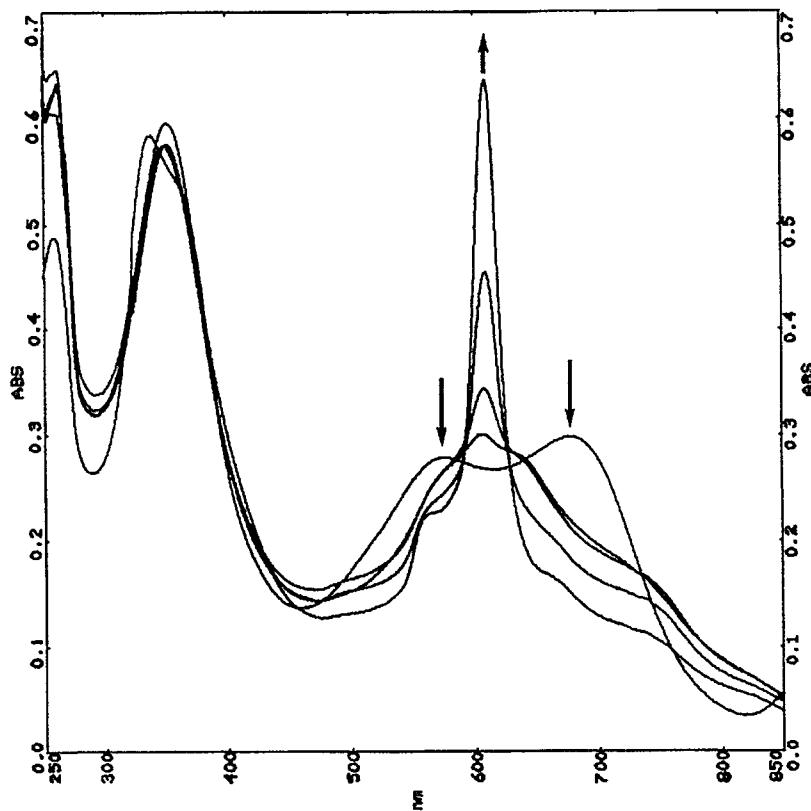


Figure 6: Porphyrazine 2 titrated with  $\text{Zn}(\text{ClO}_4)_2$  (0, 4, 8, 20, 40 equiv).

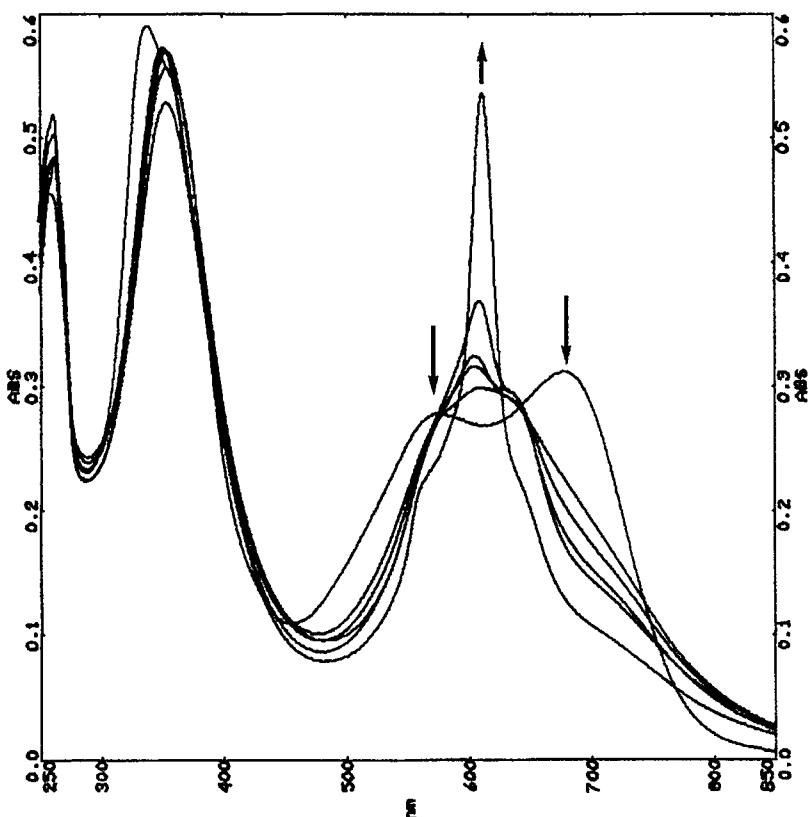


Figure 7: Porphyrazine 2 titrated with CdCl<sub>2</sub> (0, 2, 4, 8, 20, 40 equiv).

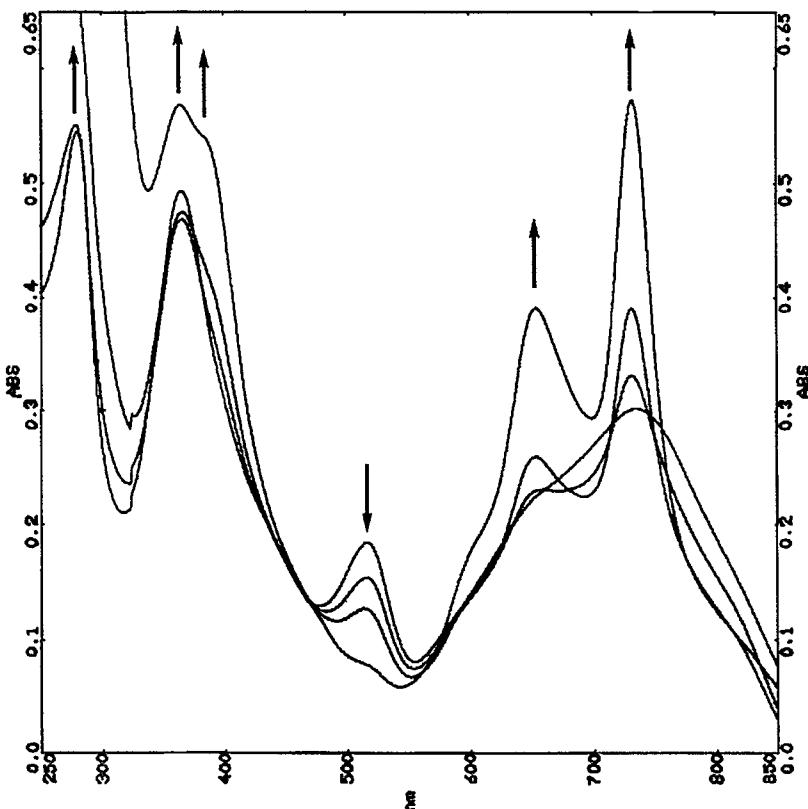
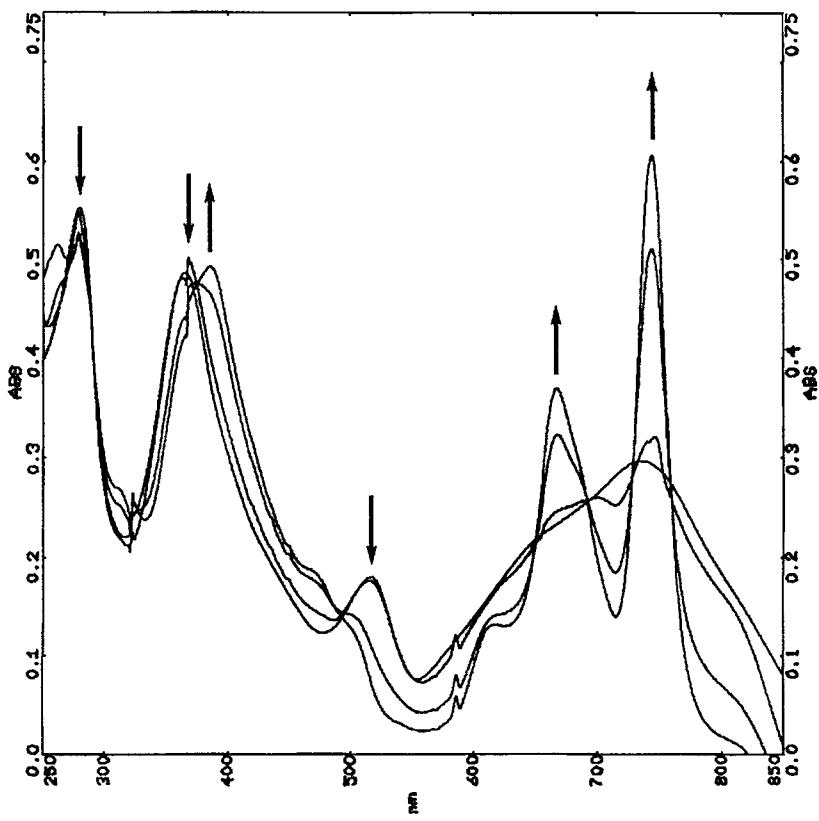
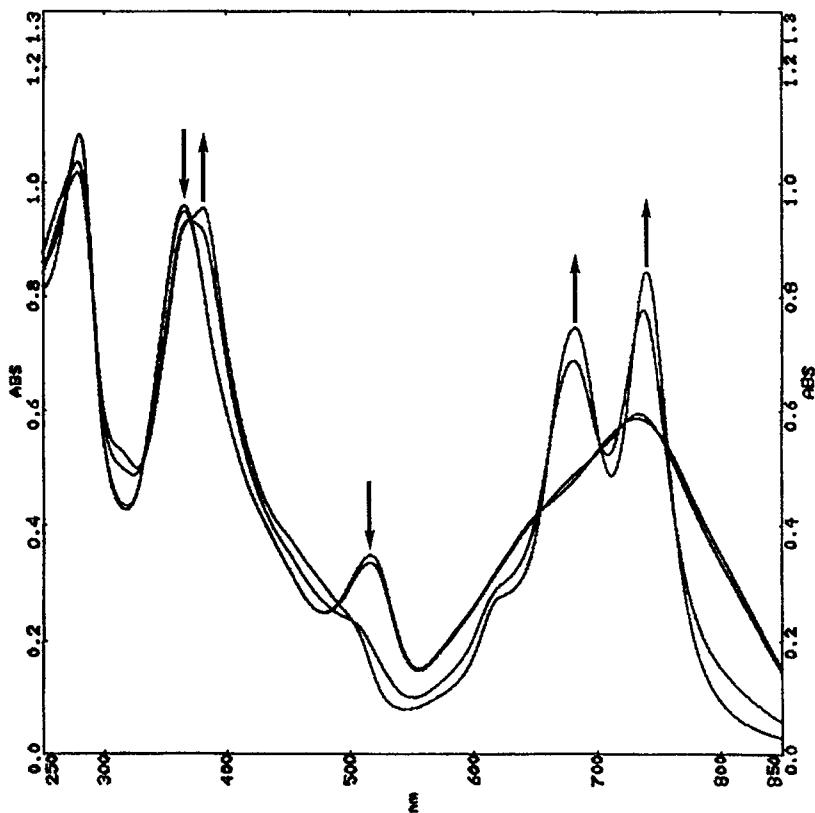


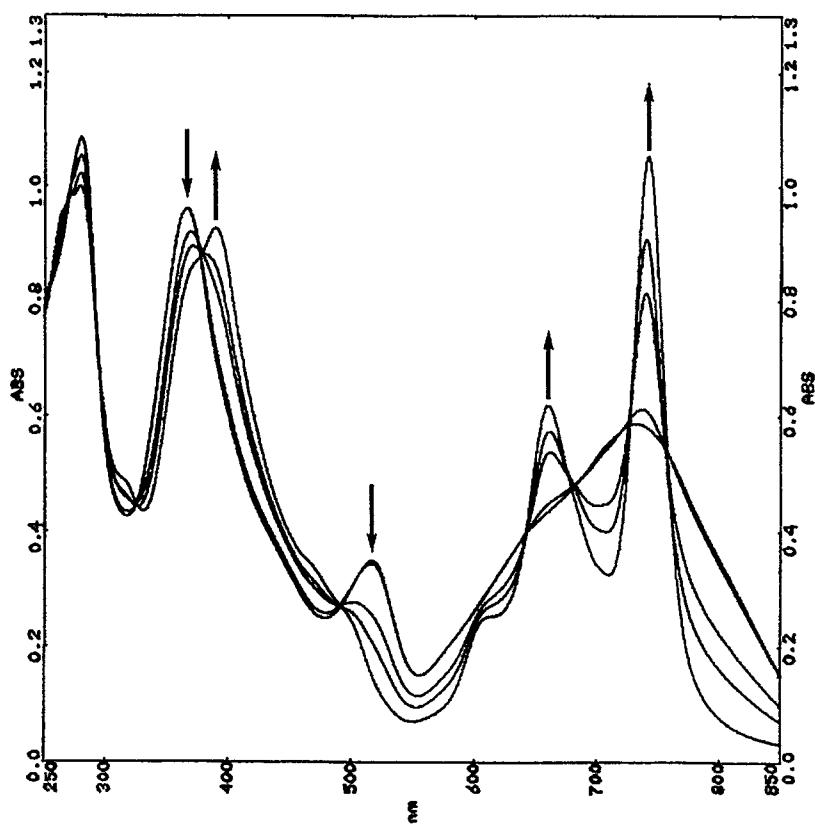
Figure 8: Norphthalocyanine 3 titrated with Cu(OAc)<sub>2</sub> (0, 2, 10, 100 equiv).



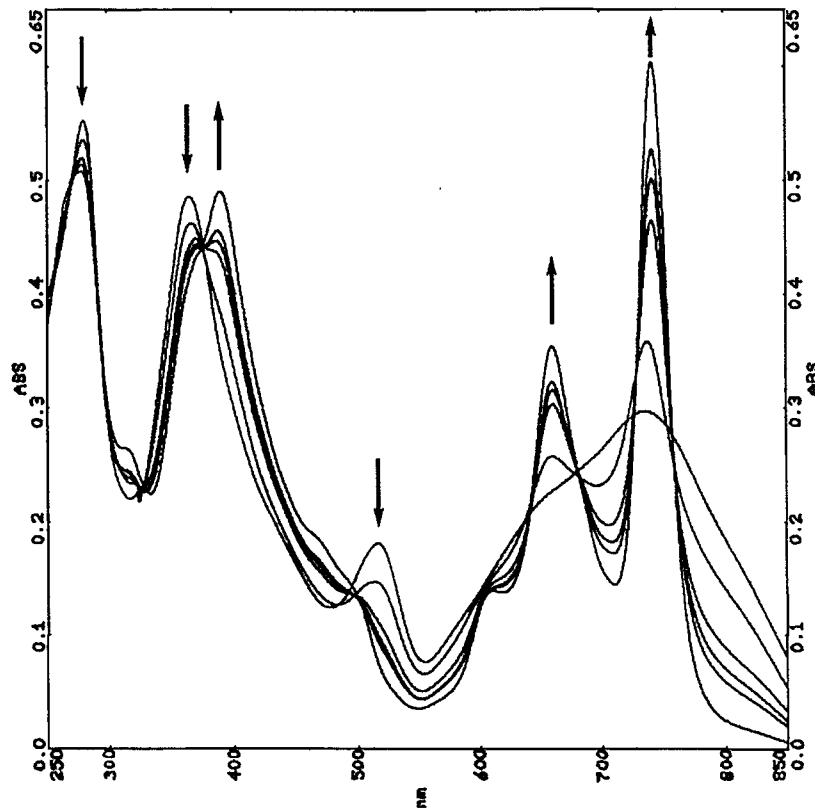
**Figure 9:** Norphthalocyanine **3** titrated with  $\text{Hg}(\text{ClO}_4)_2 \cdot 3\text{H}_2\text{O}$  (0, 1, 2, 10 equiv).



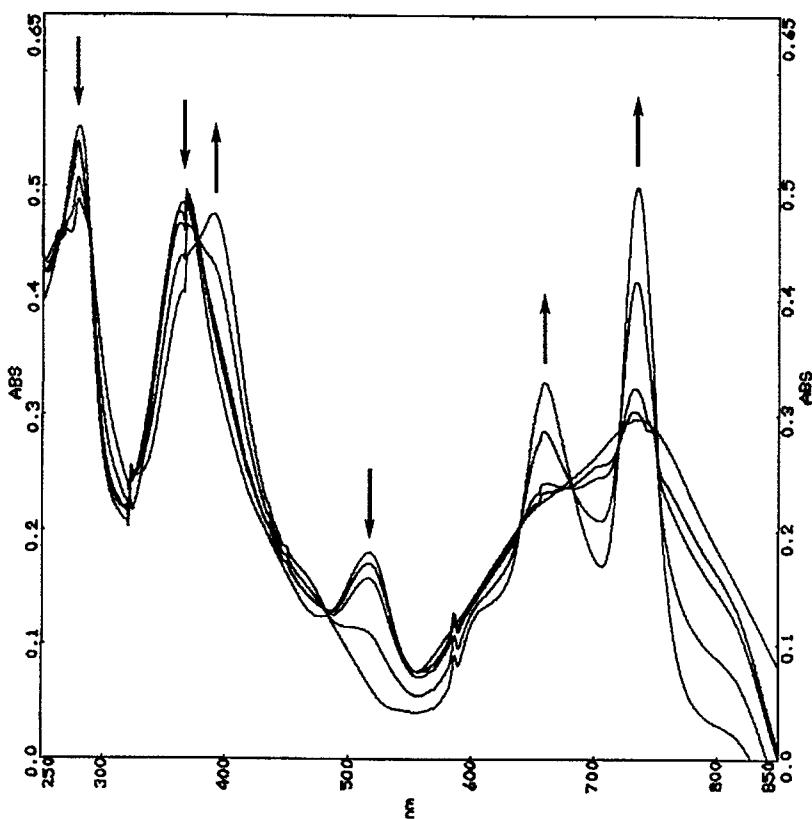
**Figure 10:** Norphthalocyanine **3** titrated with  $\text{AgBF}_4$  (0, 1, 2, 4 equiv).



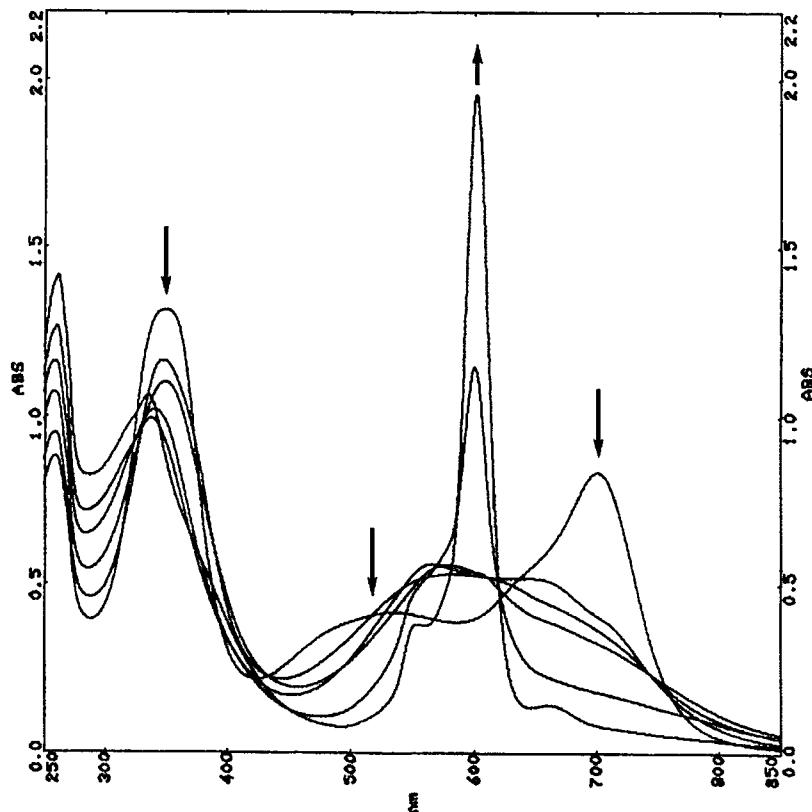
**Figure 11:** Norphthalocyanine 3 titrated with  $\text{Zn}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$  (0, 2, 4, 10, 100 equiv).



**Figure 12:** Norphthalocyanine 3 titrated with  $\text{Co}(\text{BF}_4)_2$  (0, 1, 2, 4, 10, 100 equiv).



**Figure 13:** Norphthalocyanine **3** titrated with CdCl<sub>2</sub> (0, 1, 2, 10, 100 equiv).



**Figure 14:** Porphyrazine **4** titrated with CuCl<sub>2</sub> (0, 1, 2, 3, 4, 6 equiv).

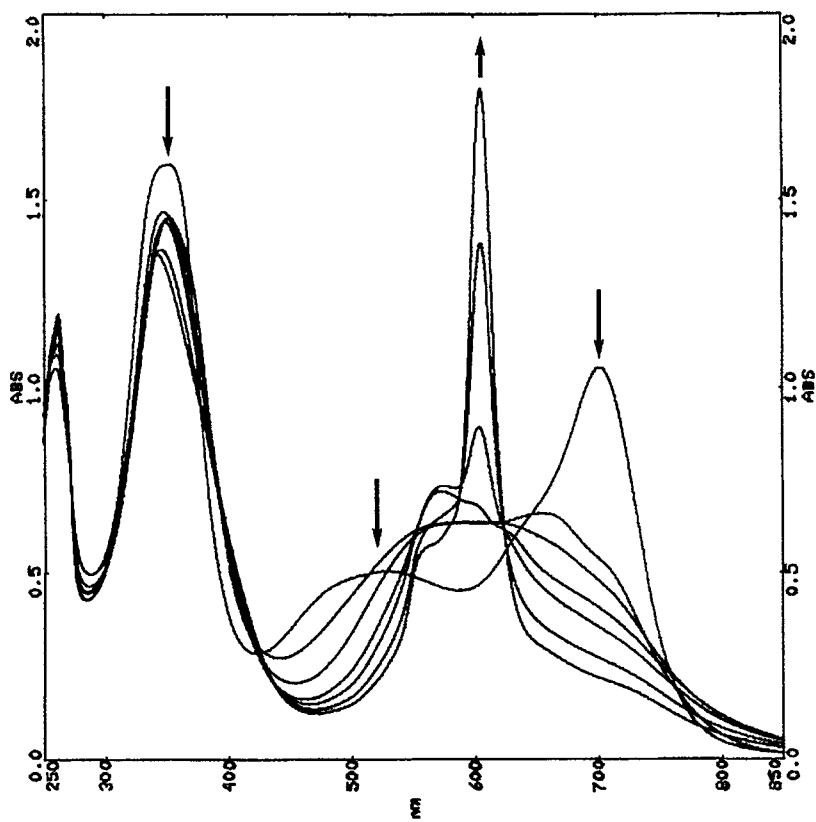


Figure 15: Porphyrazine 4 titrated with  $\text{Zn}(\text{ClO}_4)_2$  (0, 1, 2, 3, 4, 6, 8 equiv).

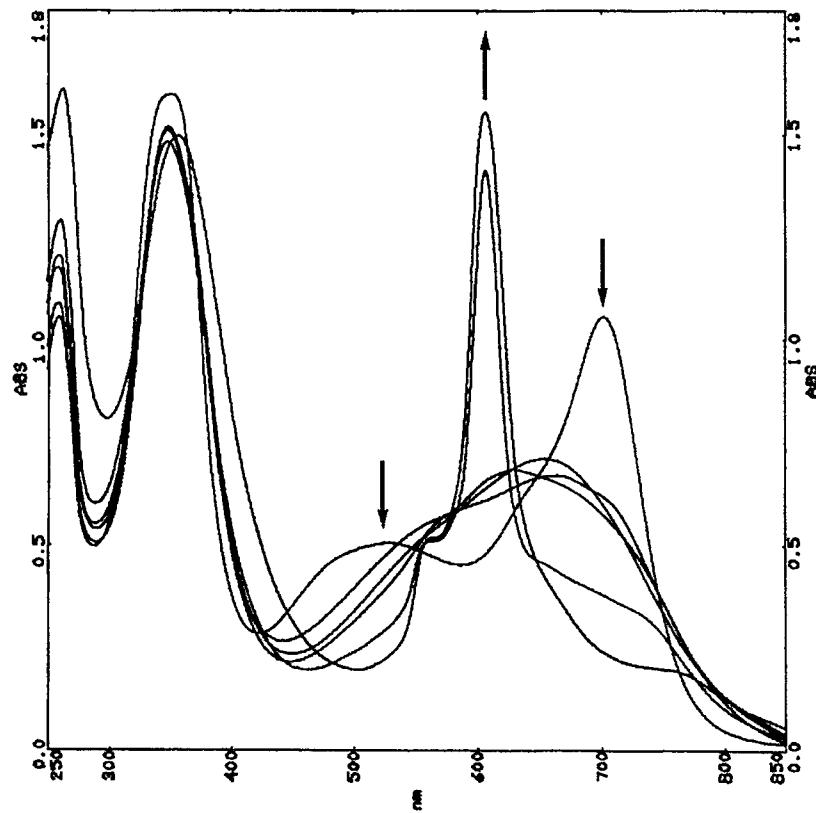


Figure 16: Porphyrazine 4 titrated with  $\text{Hg}(\text{ClO}_4)_2$  (0, 1, 2, 3, 4, 6 equiv).

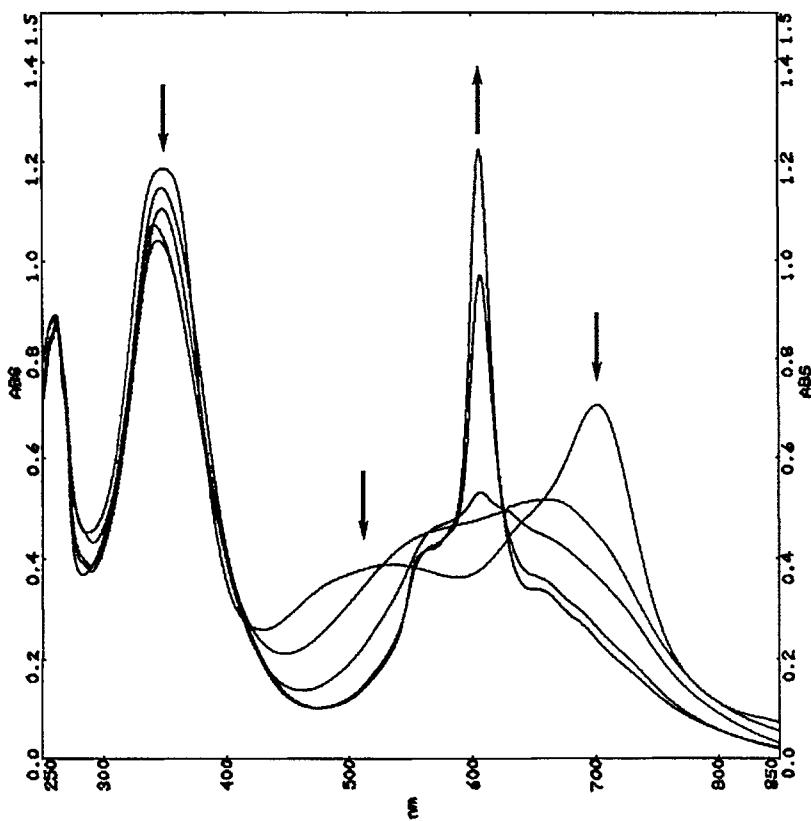


Figure 17: Porphyrazine 4 titrated with CdCl<sub>2</sub> (0, 1, 2, 3, 4 equiv).

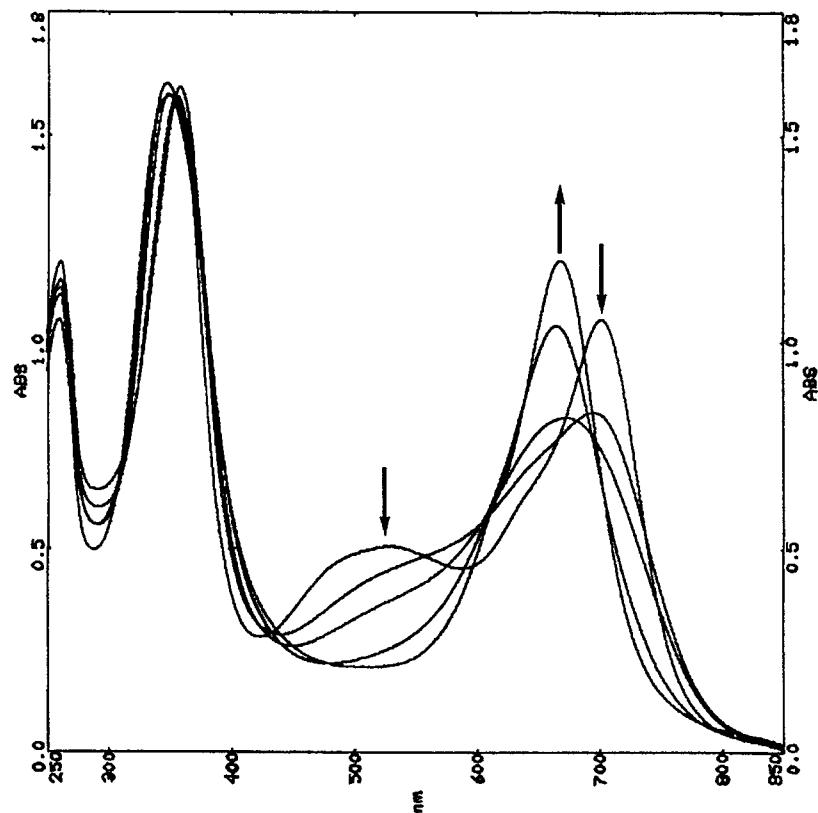
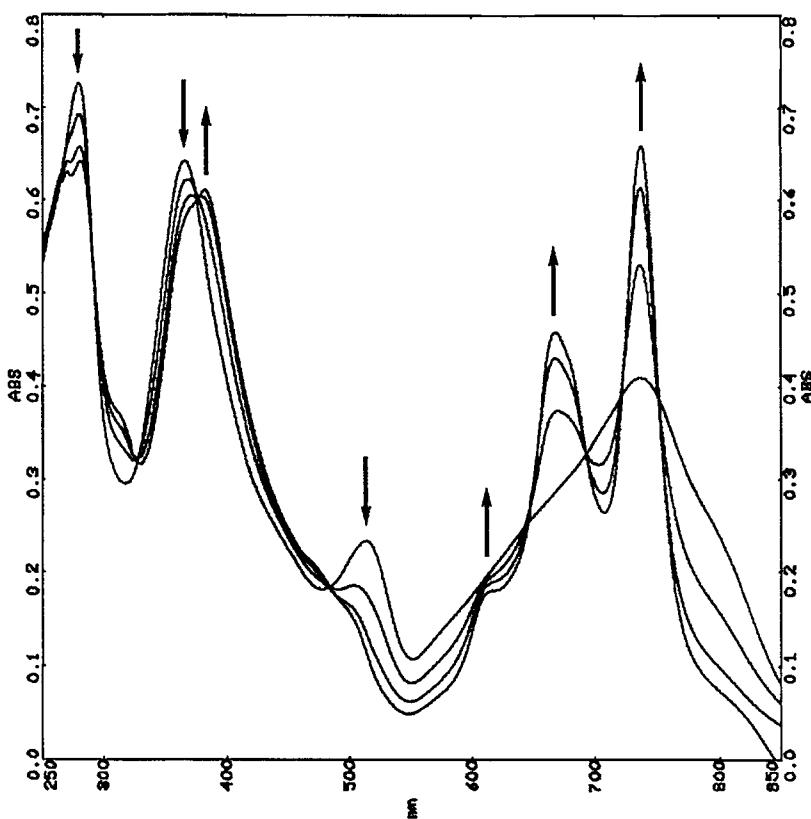
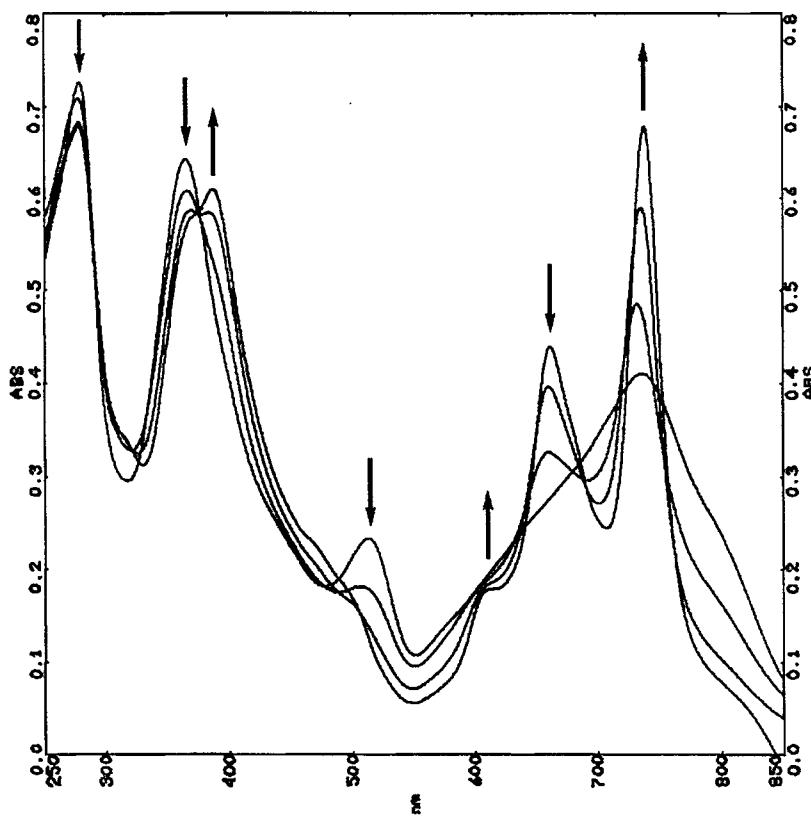


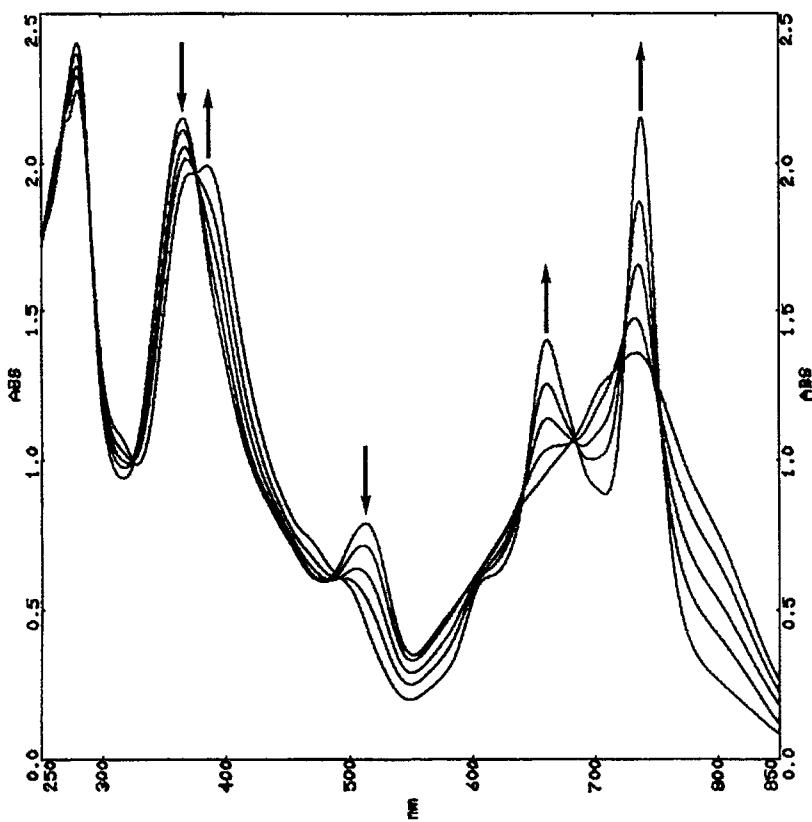
Figure 18: Porphyrazine 4 titrated with AgBF<sub>4</sub> (0, 1, 2, 4, 6 equiv).



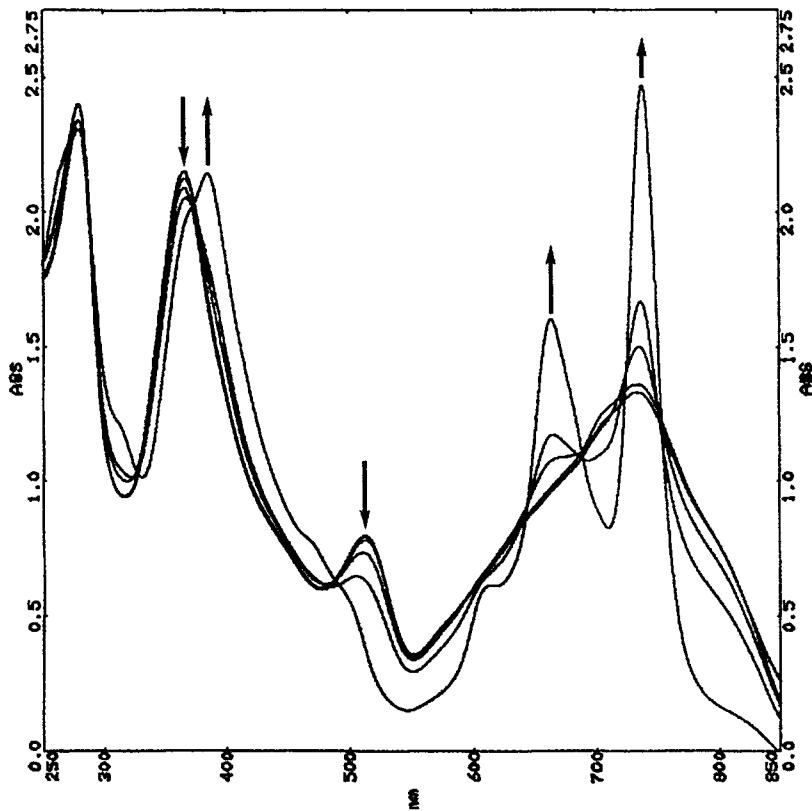
**Figure 19:** Norphthalocyanine **5** titrated with CdCl<sub>2</sub> (0.0, 0.25, 0.50, 1.0 equiv).



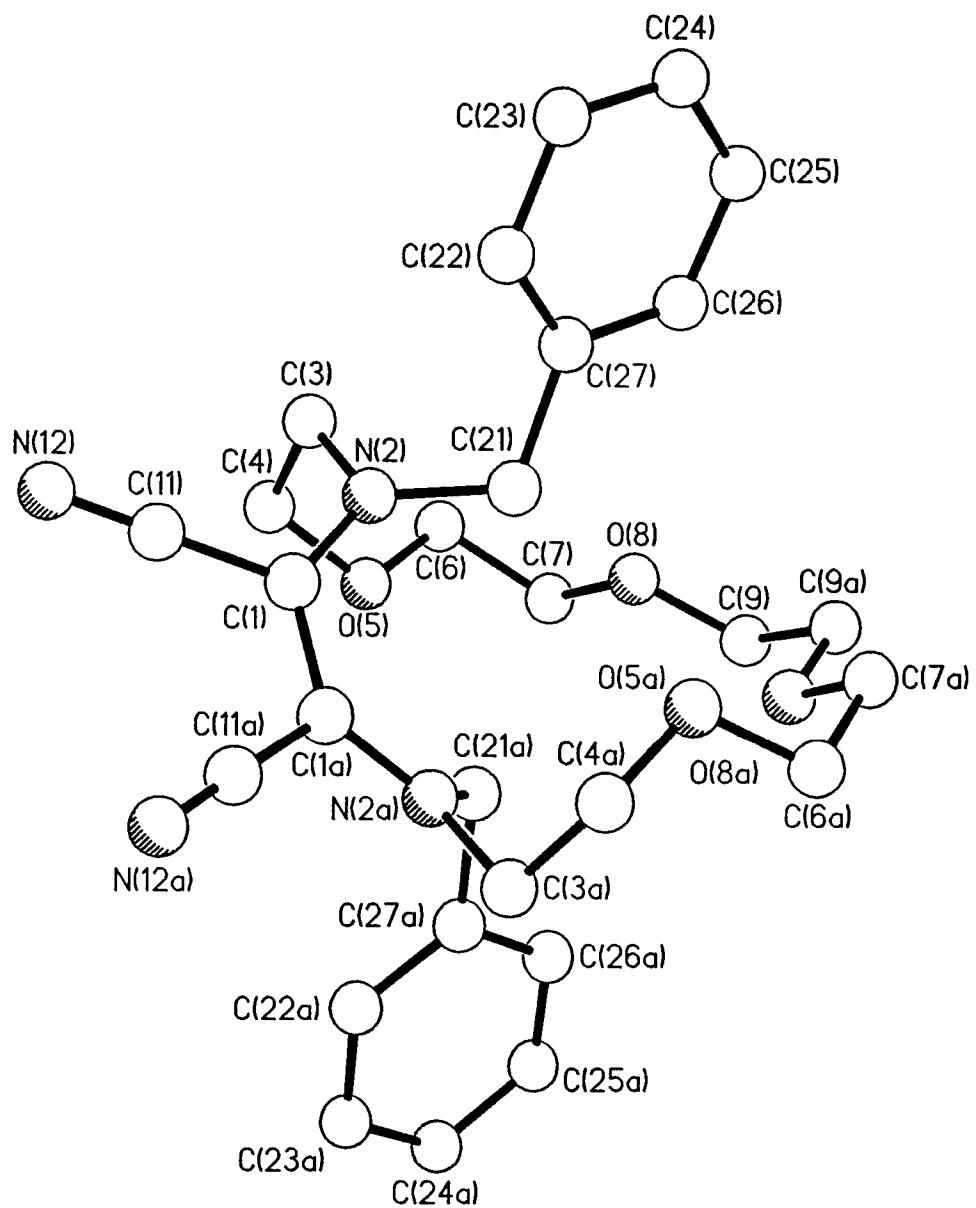
**Figure 20:** Norphthalocyanine **5** titrated with Co(BF<sub>4</sub>)<sub>2</sub> (0.0, 0.25, 0.50, 1.0 equiv).



**Figure 21:** Norphthalocyanine 5 titrated with  $\text{Zn}(\text{ClO}_4)_2$  (0.0, 0.50, 1.0, 1.5, 2.0 equiv).



**Figure 22:** Norphthalocyanine 5 titrated with  $\text{Hg}(\text{ClO}_4)_2$  (0.0, 0.50, 1.0, 1.5, 2.0 equiv).



**Table 1. Crystal data and structure refinement for 1.**

|                                   |   |
|-----------------------------------|---|
| Identification code               | AGMB19  |
| Empirical formula                 | C <sub>28</sub> H <sub>34</sub> N <sub>4</sub> O <sub>4</sub>                                   |
| Formula weight                    | 490.59  |
| Temperature                       | 293(2) K  |
| Diffractometer Used               | Siemens P4/PC   |
| Wavelength                        | 1.54178 Å   |
| Crystal system                    | Monoclinic  |
| Space group                       | C2/c  |
| Unit cell dimensions              | a = 14.203(3) Å alpha = 90°<br>b = 11.753(3) Å beta = 112.13(2)°<br>c = 16.923(5) Å gamma = 90° |
| Volume, Z                         | 2616.9(12) Å <sup>3</sup> , 4   |
| Density (calculated)              | 1.245 Mg/m <sup>3</sup>   |
| Absorption coefficient            | 0.680 mm <sup>-1</sup>  |
| F(000)                            | 1048  |
| Crystal colour/morphology         | Yellow cubes  |
| Crystal size                      | 0.37 x 0.33 x 0.33 mm   |
| θ range for data collection       | 5.05 to 62.49°  |
| Limiting indices                  | -16 ≤ h ≤ 15, 0 ≤ k ≤ 13,<br>0 ≤ l ≤ 19   |
| Scan type                         | ω-scans   |
| Reflections collected             | 2097  |
| Independent reflections           | 2097 ( $R_{\text{int}} = 0.0000$ )  |
| Observed reflections [F>4σ(F)]    | 1799  |
| Absorption correction             | None  |
| Structure solution method         | Direct  |
| Refinement method                 | Full-matrix least-squares on F <sup>2</sup>   |
| Data / restraints / parameters    | 2050 / 0 / 152  |
| Goodness-of-fit on F <sup>2</sup> | 1.058   |
| Final R indices [F>4σ(F)]         | R1 = 0.0928, wR2 = 0.2550   |
| R indices (all data)              | R1 = 0.1012, wR2 = 0.2888   |
| Extinction coefficient            | 0.0035(8)   |
| Largest diff. peak and hole       | 0.507 and -0.439 eÅ <sup>-3</sup>   |
| Mean and maximum shift/error      | 0.000 and 0.000   |

**Table 2.** Atomic coordinates [ $\times 10^4$ ], equivalent isotropic displacement parameters [ $\text{\AA}^2 \times 10^3$ ] and site occupancy factors for 1.  $U(\text{eq})$  is defined as one third of the trace of the orthogonalized  $U_{ij}$  tensor.

|       | x       | y        | z       | $U(\text{eq})$ | sof |
|-------|---------|----------|---------|----------------|-----|
| C(1)  | 502(2)  | 2538(2)  | 2528(2) | 34(1)          | 1   |
| N(2)  | 1147(2) | 1630(2)  | 2641(1) | 39(1)          | 1   |
| C(3)  | 1840(2) | 1568(3)  | 2183(2) | 54(1)          | 1   |
| C(4)  | 1294(3) | 1361(4)  | 1244(2) | 75(1)          | 1   |
| O(5)  | 667(2)  | 387(3)   | 1072(1) | 78(1)          | 1   |
| C(6)  | 1156(3) | -661(5)  | 1049(3) | 97(2)          | 1   |
| C(7)  | 508(4)  | -1621(5) | 1098(3) | 104(2)         | 1   |
| O(8)  | 552(2)  | -1729(2) | 1946(2) | 90(1)          | 1   |
| C(9)  | -6(4)   | -2679(3) | 2066(3) | 115(2)         | 1   |
| C(11) | 908(2)  | 3630(2)  | 2442(2) | 47(1)          | 1   |
| N(12) | 1232(2) | 4491(2)  | 2367(3) | 77(1)          | 1   |
| C(21) | 1117(2) | 656(2)   | 3164(2) | 39(1)          | 1   |
| C(22) | 2677(2) | 1361(1)  | 4385(1) | 65(1)          | 1   |
| C(23) | 3555(2) | 1147(2)  | 5095(1) | 86(1)          | 1   |
| C(24) | 3858(2) | 33(2)    | 5333(1) | 82(1)          | 1   |
| C(25) | 3283(2) | -867(2)  | 4862(2) | 88(1)          | 1   |
| C(26) | 2405(2) | -654(1)  | 4152(1) | 67(1)          | 1   |
| C(27) | 2102(1) | 461(2)   | 3914(1) | 38(1)          | 1   |

**Table 3. Bond lengths [Å] and angles [°] for 1.**

|                   |            |                   |           |
|-------------------|------------|-------------------|-----------|
| C(1)-N(2)         | 1.373(3)   | C(1)-C(1)#1       | 1.394(5)  |
| C(1)-C(11)        | 1.436(4)   | N(2)-C(21)        | 1.457(3)  |
| N(2)-C(3)         | 1.465(3)   | C(3)-C(4)         | 1.503(5)  |
| C(4)-O(5)         | 1.412(5)   | O(5)-C(6)         | 1.421(5)  |
| C(6)-C(7)         | 1.478(7)   | C(7)-O(8)         | 1.418(6)  |
| O(8)-C(9)         | 1.428(6)   | C(9)-C(9)#1       | 1.461(12) |
| C(11)-N(12)       | 1.138(4)   | C(21)-C(27)       | 1.511(3)  |
| <br>              |            |                   |           |
| N(2)-C(1)-C(1)#1  | 128.42(14) | N(2)-C(1)-C(11)   | 115.9(2)  |
| C(1)#1-C(1)-C(11) | 115.67(14) | C(1)-N(2)-C(21)   | 121.7(2)  |
| C(1)-N(2)-C(3)    | 120.7(2)   | C(21)-N(2)-C(3)   | 117.5(2)  |
| N(2)-C(3)-C(4)    | 112.7(3)   | O(5)-C(4)-C(3)    | 112.5(3)  |
| C(4)-O(5)-C(6)    | 115.6(3)   | O(5)-C(6)-C(7)    | 109.8(3)  |
| O(8)-C(7)-C(6)    | 109.5(3)   | C(7)-O(8)-C(9)    | 113.5(3)  |
| O(8)-C(9)-C(9)#1  | 110.3(3)   | N(12)-C(11)-C(1)  | 179.3(4)  |
| N(2)-C(21)-C(27)  | 113.6(2)   | C(26)-C(27)-C(21) | 118.3(2)  |
| C(22)-C(27)-C(21) | 121.6(2)   |                   |           |

Symmetry transformations used to generate equivalent atoms:

#1 -x,y,-z+1/2

**Table 4. Anisotropic displacement parameters [Å<sup>2</sup> × 10<sup>3</sup>] for 1.**

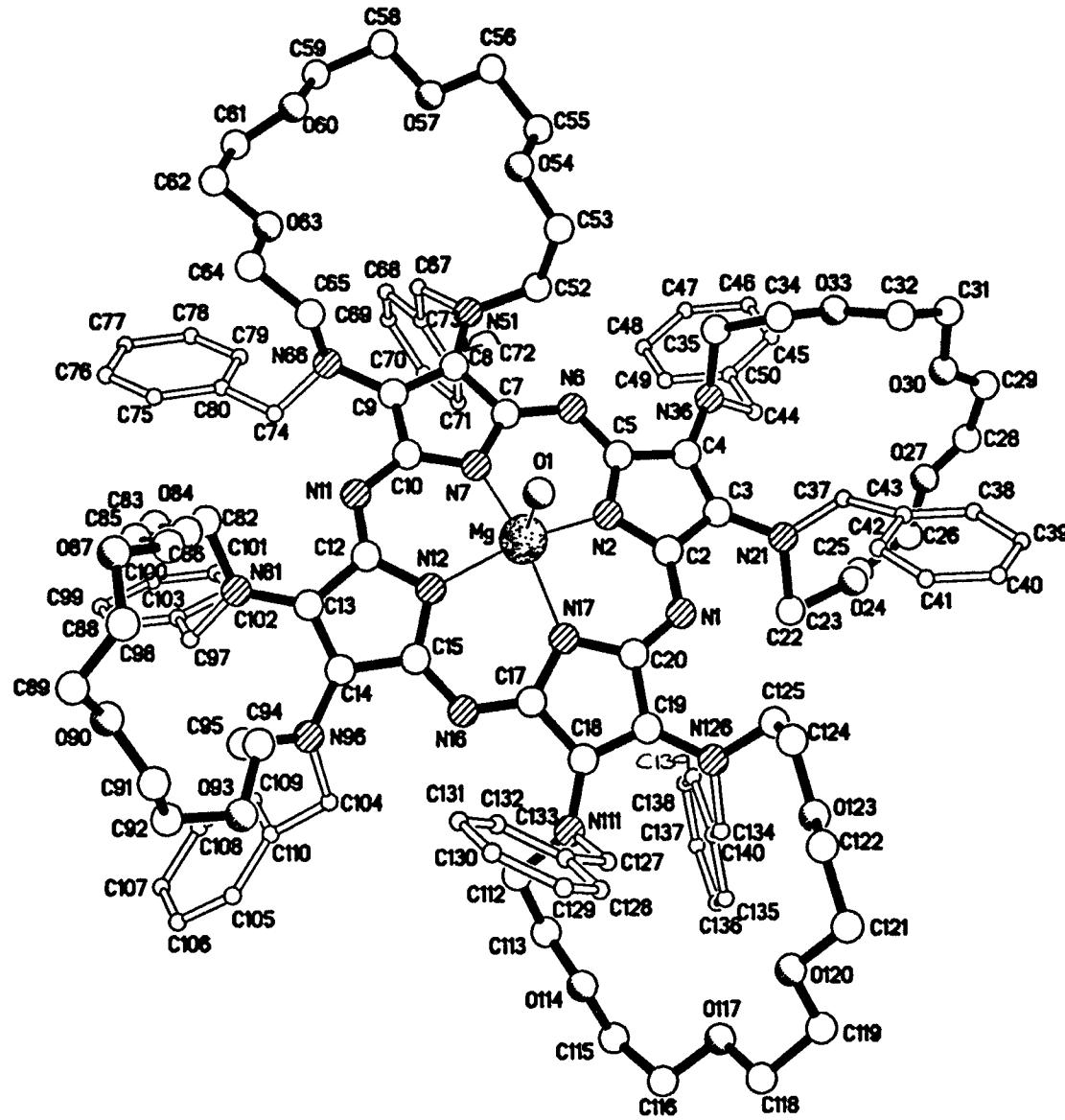
The anisotropic displacement factor exponent takes the form:

$$-2\pi^2 [ (ha^*)^2 U_{11} + \dots + 2hka^* b^* U_{12} ]$$

|       | U11    | U22    | U33    | U23    | U13    | U12    |
|-------|--------|--------|--------|--------|--------|--------|
| C(1)  | 28(1)  | 35(1)  | 33(1)  | 2(1)   | 4(1)   | 0(1)   |
| N(2)  | 34(1)  | 45(1)  | 38(1)  | 7(1)   | 14(1)  | 10(1)  |
| C(3)  | 43(2)  | 71(2)  | 54(2)  | 11(2)  | 25(1)  | 14(1)  |
| C(4)  | 69(2)  | 113(3) | 51(2)  | 16(2)  | 30(2)  | 26(2)  |
| O(5)  | 57(2)  | 122(2) | 49(1)  | -19(1) | 13(1)  | 30(2)  |
| C(6)  | 65(3)  | 139(4) | 75(3)  | -48(3) | 14(2)  | 32(3)  |
| C(7)  | 74(3)  | 131(4) | 82(3)  | -66(3) | 2(2)   | 23(3)  |
| O(8)  | 92(2)  | 66(2)  | 75(2)  | -28(1) | -13(2) | 11(1)  |
| C(9)  | 112(4) | 51(2)  | 112(4) | -21(2) | -36(3) | 15(2)  |
| C(11) | 26(1)  | 47(2)  | 58(2)  | 8(1)   | 6(1)   | -1(1)  |
| N(12) | 49(2)  | 52(2)  | 122(3) | 18(2)  | 23(2)  | -12(1) |
| C(21) | 34(1)  | 37(1)  | 39(1)  | 3(1)   | 6(1)   | 1(1)   |
| C(22) | 60(2)  | 60(2)  | 52(2)  | 8(2)   | -6(2)  | -11(2) |
| C(23) | 63(2)  | 108(3) | 57(2)  | 10(2)  | -11(2) | -28(2) |
| C(24) | 56(2)  | 119(4) | 53(2)  | 24(2)  | -2(2)  | 22(2)  |
| C(25) | 87(3)  | 84(3)  | 64(2)  | 15(2)  | -2(2)  | 39(2)  |
| C(26) | 72(2)  | 54(2)  | 57(2)  | 3(2)   | 4(2)   | 19(2)  |
| C(27) | 34(1)  | 44(1)  | 32(1)  | 3(1)   | 10(1)  | 3(1)   |

**Table 5. Hydrogen coordinates ( $\times 10^4$ ), isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) and site occupancy factors for 1.**

|        | x       | y        | z       | U(eq) | s <sub>of</sub> |
|--------|---------|----------|---------|-------|-----------------|
| H(3A)  | 2325(2) | 960(3)   | 2424(2) | 65    | 1               |
| H(3B)  | 2216(2) | 2276(3)  | 2265(2) | 65    | 1               |
| H(4A)  | 880(3)  | 2020(4)  | 988(2)  | 90    | 1               |
| H(4B)  | 1790(3) | 1271(4)  | 982(2)  | 90    | 1               |
| H(6A)  | 1805(3) | -697(5)  | 1524(3) | 116   | 1               |
| H(6B)  | 1280(3) | -711(5)  | 524(3)  | 116   | 1               |
| H(7A)  | -188(4) | -1488(5) | 713(3)  | 125   | 1               |
| H(7B)  | 742(4)  | -2319(5) | 926(3)  | 125   | 1               |
| H(9A)  | 293(4)  | -3379(3) | 1966(3) | 137   | 1               |
| H(9B)  | -702(4) | -2641(3) | 1660(3) | 137   | 1               |
| H(21A) | 956(2)  | -21(2)   | 2810(2) | 47    | 1               |
| H(21B) | 576(2)  | 769(2)   | 3374(2) | 47    | 1               |
| H(22A) | 2474(2) | 2107(1)  | 4226(1) | 78    | 1               |
| H(23A) | 3939(2) | 1749(3)  | 5410(2) | 103   | 1               |
| H(24A) | 4445(2) | -110(3)  | 5808(2) | 99    | 1               |
| H(25A) | 3486(3) | -1613(2) | 5021(2) | 105   | 1               |
| H(26A) | 2020(2) | -1256(2) | 3837(2) | 80    | 1               |



**Table 1. Crystal data and structure refinement for 1.**

|                                   |   |
|-----------------------------------|---|
| Identification code               | AB9521  |
| Empirical formula                 | C <sub>112</sub> H <sub>136</sub> N <sub>16</sub> O <sub>17</sub> Mg . 0.75MeCO <sub>2</sub> Et |
| Formula weight                    | 2068.76   |
| Temperature                       | 203(2) K  |
| Diffractometer Used               | Siemens P4/PC   |
| Wavelength                        | 1.54178 Å   |
| Crystal system                    | Monoclinic  |
| Space group                       | P2 <sub>1</sub> /n  |
| Unit cell dimensions              | a = 24.419(9) Å alpha = 90°<br>b = 17.824(8) Å beta = 99.43(3)°<br>c = 25.512(10) Å gamma = 90° |
| Volume, Z                         | 10954(7) Å <sup>3</sup> , 4   |
| Density (calculated)              | 1.254 Mg/m <sup>3</sup>   |
| Absorption coefficient            | 0.746 mm <sup>-1</sup>  |
| F(000)                            | 4416  |
| Crystal colour/morphology         | Deep red blocks   |
| Crystal size                      | 0.43 x 0.33 x 0.27 mm   |
| θ range for data collection       | 2.32 to 56.08°  |
| Limiting indices                  | 0 ≤ h ≤ 26, 0 ≤ k ≤ 19,<br>-27 ≤ l ≤ 27   |
| Scan type                         | ω-scans   |
| Reflections collected             | 14673   |
| Independent reflections           | 14288 ( $R_{\text{int}} = 0.0692$ )   |
| Observed reflections [F>4σ(F)]    | 7682  |
| Absorption correction             | None  |
| Structure solution method         | Direct  |
| Refinement method                 | Full-matrix-block least-squares on F <sup>2</sup>   |
| Data / restraints / parameters    | 12172 / 673 / 1328  |
| Goodness-of-fit on F <sup>2</sup> | 1.042   |
| Final R indices [F>4σ(F)]         | R1 = 0.1481, wR2 = 0.4019   |
| R indices (all data)              | R1 = 0.2208, wR2 = 0.5143   |
| Extinction coefficient            | 0.00045(13)   |
| Largest diff. peak and hole       | 0.848 and -0.578 eÅ <sup>-3</sup>   |
| Mean and maximum shift/error      | 0.118 and -0.738  |

**Table 2.** Atomic coordinates [ $\times 10^4$ ], equivalent isotropic displacement parameters [ $\text{\AA}^2 \times 10^3$ ] and site occupancy factors for 1. U(eq) is defined as one third of the trace of the orthogonalized  $U_{ij}$  tensor.

|       | x         | y        | z        | U(eq)   | sof |
|-------|-----------|----------|----------|---------|-----|
| Mg    | 8833(1)   | 5075(2)  | 1066(1)  | 52(1)   | 1   |
| O(1)  | 8820(2)   | 6000(4)  | 615(2)   | 70(2)   | 1   |
| N(1)  | 8933(3)   | 5872(4)  | 2290(3)  | 61(2)   | 1   |
| C(2)  | 9401(4)   | 5623(5)  | 2147(3)  | 62(2)   | 1   |
| N(2)  | 9450(3)   | 5251(4)  | 1691(2)  | 56(2)   | 1   |
| C(3)  | 9955(4)   | 5708(6)  | 2480(3)  | 73(3)   | 1   |
| C(4)  | 10312(4)  | 5410(6)  | 2195(3)  | 72(3)   | 1   |
| C(5)  | 9996(4)   | 5113(5)  | 1707(3)  | 62(2)   | 1   |
| N(6)  | 10226(3)  | 4707(4)  | 1360(3)  | 63(2)   | 1   |
| C(7)  | 9937(3)   | 4334(5)  | 947(3)   | 57(2)   | 1   |
| N(7)  | 9378(3)   | 4352(4)  | 803(2)   | 54(2)   | 1   |
| C(8)  | 10188(3)  | 3813(5)  | 597(4)   | 60(2)   | 1   |
| C(9)  | 9736(3)   | 3525(5)  | 256(3)   | 55(2)   | 1   |
| C(10) | 9246(4)   | 3868(5)  | 385(3)   | 59(2)   | 1   |
| N(11) | 8727(3)   | 3715(4)  | 117(3)   | 57(2)   | 1   |
| C(12) | 8267(3)   | 3954(5)  | 259(3)   | 54(2)   | 1   |
| N(12) | 8224(3)   | 4424(4)  | 685(2)   | 52(2)   | 1   |
| C(13) | 7713(3)   | 3690(5)  | 11(3)    | 62(2)   | 1   |
| C(14) | 7349(3)   | 3971(6)  | 327(4)   | 71(3)   | 1   |
| C(15) | 7666(3)   | 4427(5)  | 733(3)   | 58(2)   | 1   |
| N(16) | 7439(3)   | 4788(4)  | 1110(3)  | 58(2)   | 1   |
| C(17) | 7732(3)   | 5194(4)  | 1495(3)  | 54(2)   | 1   |
| N(17) | 8305(3)   | 5296(4)  | 1577(3)  | 57(2)   | 1   |
| C(18) | 7484(4)   | 5586(5)  | 1899(3)  | 58(2)   | 1   |
| C(19) | 7915(4)   | 5945(5)  | 2218(3)  | 63(2)   | 1   |
| C(20) | 8424(4)   | 5735(5)  | 2023(3)  | 59(2)   | 1   |
| N(21) | 10026(4)  | 6077(6)  | 2977(3)  | 98(3)   | 1   |
| C(22) | 9689(5)   | 5805(10) | 3405(5)  | 123(5)  | 1   |
| C(23) | 9962(7)   | 5179(9)  | 3769(6)  | 131(5)  | 1   |
| O(24) | 10423(8)  | 5610(11) | 4096(8)  | 237(7)  | 1   |
| C(25) | 10778(14) | 5134(21) | 4435(15) | 336(24) | 1   |
| C(26) | 11215(14) | 5514(18) | 4639(12) | 242(14) | 1   |
| O(27) | 11507(9)  | 5977(12) | 4360(8)  | 261(11) | 1   |
| C(28) | 11909(12) | 6361(18) | 4464(12) | 234(12) | 1   |
| C(29) | 12122(8)  | 6898(11) | 4162(7)  | 149(6)  | 1   |
| O(30) | 11885(7)  | 6959(11) | 3645(5)  | 225(8)  | 1   |
| C(31) | 12118(10) | 7347(15) | 3292(7)  | 234(14) | 1   |
| C(32) | 11683(10) | 7436(14) | 2759(8)  | 212(10) | 1   |
| O(33) | 11690(4)  | 6671(7)  | 2548(4)  | 147(4)  | 1   |
| C(34) | 11299(5)  | 6582(9)  | 2077(4)  | 105(4)  | 1   |
| C(35) | 11231(4)  | 5736(8)  | 1972(4)  | 90(3)   | 1   |
| N(36) | 10910(3)  | 5330(6)  | 2314(3)  | 96(3)   | 1   |
| C(37) | 10452(8)  | 6571(10) | 3185(6)  | 153(7)  | 1   |
| C(38) | 10566(6)  | 7843(9)  | 3728(5)  | 249(13) | 1   |
| C(39) | 10311(9)  | 8510(7)  | 3835(6)  | 243(14) | 1   |
| C(40) | 9805(9)   | 8712(8)  | 3536(9)  | 349(24) | 1   |
| C(41) | 9553(6)   | 8246(11) | 3130(9)  | 358(26) | 1   |
| C(42) | 9807(7)   | 7579(9)  | 3022(6)  | 250(14) | 1   |
| C(43) | 10314(7)  | 7377(7)  | 3321(5)  | 155(7)  | 1   |
| C(44) | 11179(6)  | 5224(8)  | 2859(5)  | 116(4)  | 1   |
| C(45) | 12142(5)  | 4716(8)  | 3126(5)  | 220(11) | 1   |
| C(46) | 12532(4)  | 4148(12) | 3123(7)  | 237(11) | 1   |
| C(47) | 12382(7)  | 3482(10) | 2854(8)  | 293(17) | 1   |

|        |          |          |           |         |      |
|--------|----------|----------|-----------|---------|------|
| C(48)  | 11842(8) | 3384(7)  | 2588(7)   | 258(14) | 1    |
| C(49)  | 11453(5) | 3952(8)  | 2591(5)   | 204(10) | 1    |
| C(50)  | 11603(5) | 4619(7)  | 2860(5)   | 126(5)  | 1    |
| N(51)  | 10746(3) | 3640(4)  | 655(3)    | 60(2)   | 1    |
| C(52)  | 11197(4) | 4041(6)  | 1040(4)   | 87(3)   | 1    |
| C(53)  | 11449(5) | 4655(7)  | 780(4)    | 90(3)   | 1    |
| O(54)  | 11754(3) | 4410(4)  | 366(3)    | 88(2)   | 1    |
| C(55)  | 12303(4) | 4147(7)  | 560(5)    | 98(4)   | 1    |
| C(56)  | 12572(4) | 3854(7)  | 91(5)     | 91(3)   | 1    |
| O(57)  | 12273(3) | 3236(4)  | -119(3)   | 87(2)   | 1    |
| C(58)  | 12458(4) | 2974(7)  | -576(5)   | 94(3)   | 1    |
| C(59)  | 12118(5) | 2293(8)  | -803(5)   | 111(4)  | 1    |
| O(60)  | 11587(3) | 2560(5)  | -1015(3)  | 102(2)  | 1    |
| C(61)  | 11216(5) | 1974(7)  | -1176(5)  | 98(4)   | 1    |
| C(62)  | 10650(4) | 2330(6)  | -1391(4)  | 85(3)   | 1    |
| O(63)  | 10484(2) | 2728(4)  | -964(2)   | 71(2)   | 1    |
| C(64)  | 9955(4)  | 3039(5)  | -1125(3)  | 65(2)   | 1    |
| C(65)  | 9794(4)  | 3474(5)  | -669(3)   | 68(2)   | 1    |
| N(66)  | 9759(3)  | 3034(4)  | -191(3)   | 61(2)   | 1    |
| C(67)  | 10934(4) | 2939(5)  | 451(4)    | 63(2)   | 1    |
| C(68)  | 11290(3) | 1680(4)  | 736(2)    | 94(3)   | 1    |
| C(69)  | 11375(3) | 1093(3)  | 1099(3)   | 113(4)  | 1    |
| C(70)  | 11181(4) | 1147(4)  | 1580(3)   | 97(3)   | 1    |
| C(71)  | 10901(3) | 1789(4)  | 1699(2)   | 94(3)   | 1    |
| C(72)  | 10816(3) | 2376(3)  | 1336(3)   | 86(3)   | 1    |
| C(73)  | 11010(3) | 2321(3)  | 855(2)    | 57(2)   | 1    |
| C(74)  | 9333(4)  | 2454(5)  | -264(5)   | 86(3)   | 1    |
| C(75)  | 9154(3)  | 1418(5)  | -925(3)   | 108(4)  | 1    |
| C(76)  | 9291(5)  | 742(5)   | -1142(3)  | 144(6)  | 1    |
| C(77)  | 9777(5)  | 372(4)   | -927(5)   | 160(8)  | 1    |
| C(78)  | 10126(4) | 678(5)   | -494(6)   | 227(14) | 1    |
| C(79)  | 9989(3)  | 1354(5)  | -277(4)   | 149(7)  | 1    |
| C(80)  | 9503(3)  | 1724(3)  | -492(3)   | 79(3)   | 1    |
| N(81)  | 7599(3)  | 3194(4)  | -423(3)   | 75(2)   | 1    |
| C(82)  | 7857(3)  | 3289(6)  | -901(3)   | 77(3)   | 1    |
| C(83)  | 7469(5)  | 3492(6)  | -1381(4)  | 112(4)  | 1    |
| O(84)  | 7318(4)  | 4236(5)  | -1415(4)  | 127(3)  | 1    |
| C(85)  | 6936(7)  | 4416(8)  | -1869(6)  | 167(8)  | 1    |
| C(86)  | 6776(8)  | 5194(9)  | -1913(6)  | 225(12) | 1    |
| O(87)  | 6404(5)  | 5363(7)  | -2368(4)  | 176(5)  | 1    |
| C(88)  | 5912(7)  | 5663(10) | -2253(9)  | 212(9)  | 1    |
| C(89)  | 5490(8)  | 5094(16) | -2234(10) | 335(9)  | 1    |
| O(90)  | 5587(14) | 4720(19) | -1756(13) | 337(9)  | 0.50 |
| C(91)  | 5327(27) | 5005(29) | -1361(12) | 335(9)  | 0.50 |
| C(92)  | 5345(17) | 4459(28) | -937(12)  | 337(9)  | 0.50 |
| O(93)  | 5650(20) | 4700(24) | -466(11)  | 336(9)  | 0.50 |
| C(94)  | 6210(17) | 4596(29) | -453(21)  | 336(9)  | 0.50 |
| C(95)  | 6387(22) | 3861(25) | -256(14)  | 334(9)  | 0.50 |
| O(90') | 5661(12) | 4572(21) | -1846(16) | 338(9)  | 0.50 |
| C(91') | 5219(17) | 4179(25) | -1708(12) | 333(9)  | 0.50 |
| C(92') | 5267(13) | 4164(32) | -1135(12) | 336(9)  | 0.50 |
| O(93') | 5753(16) | 3819(21) | -912(14)  | 336(9)  | 0.50 |
| C(94') | 5954(19) | 4127(40) | -419(16)  | 338(9)  | 0.50 |
| C(95') | 6547(14) | 4002(46) | -310(8)   | 334(9)  | 0.50 |
| N(96)  | 6765(4)  | 3894(8)  | 261(4)    | 151(6)  | 1    |
| C(97)  | 7269(4)  | 2524(6)  | -391(4)   | 84(3)   | 1    |
| C(98)  | 7416(4)  | 1158(5)  | -527(4)   | 177(8)  | 1    |
| C(99)  | 7714(5)  | 496(4)   | -417(5)   | 197(10) | 1    |
| C(100) | 8194(4)  | 490(5)   | -40(4)    | 132(5)  | 1    |
| C(101) | 8377(3)  | 1146(6)  | 228(3)    | 108(4)  | 1    |
| C(102) | 8079(4)  | 1808(4)  | 118(3)    | 97(4)   | 1    |
| C(103) | 7599(3)  | 1814(4)  | -259(3)   | 89(3)   | 1    |

|        |          |          |          |         |      |
|--------|----------|----------|----------|---------|------|
| C(104) | 6544(7)  | 3624(11) | 736(7)   | 196(10) | 1    |
| C(105) | 5692(4)  | 2826(8)  | 517(7)   | 281(16) | 1    |
| C(106) | 5458(5)  | 2116(11) | 434(8)   | 270(15) | 1    |
| C(107) | 5797(9)  | 1485(8)  | 480(6)   | 248(16) | 1    |
| C(108) | 6370(8)  | 1564(8)  | 609(5)   | 245(17) | 1    |
| C(109) | 6604(4)  | 2274(11) | 691(4)   | 164(9)  | 1    |
| C(110) | 6265(5)  | 2905(8)  | 645(5)   | 131(5)  | 1    |
| N(111) | 6922(3)  | 5616(4)  | 1933(3)  | 64(2)   | 1    |
| C(112) | 6600(4)  | 4949(5)  | 1929(4)  | 71(3)   | 1    |
| C(113) | 6456(4)  | 4727(6)  | 2464(4)  | 79(3)   | 1    |
| O(114) | 6101(3)  | 5260(4)  | 2633(3)  | 83(2)   | 1    |
| C(115) | 5971(5)  | 5117(7)  | 3147(5)  | 101(4)  | 1    |
| C(116) | 5709(6)  | 5800(8)  | 3316(5)  | 106(4)  | 1    |
| O(117) | 6080(4)  | 6394(5)  | 3397(3)  | 106(2)  | 1    |
| C(118) | 5790(8)  | 7086(9)  | 3450(6)  | 138(6)  | 1    |
| C(119) | 6195(8)  | 7731(10) | 3493(6)  | 143(6)  | 1    |
| O(120) | 6369(4)  | 7824(5)  | 3005(3)  | 104(2)  | 1    |
| C(121) | 6678(6)  | 8501(7)  | 2998(6)  | 120(5)  | 1    |
| C(122) | 7087(6)  | 8409(6)  | 2646(6)  | 105(4)  | 1    |
| O(123) | 7484(3)  | 7856(4)  | 2856(3)  | 102(2)  | 1    |
| C(124) | 7895(5)  | 7740(6)  | 2544(6)  | 105(4)  | 1    |
| C(125) | 8214(4)  | 7059(6)  | 2751(5)  | 93(3)   | 1    |
| N(126) | 7910(4)  | 6363(4)  | 2676(3)  | 78(2)   | 1    |
| C(127) | 6653(4)  | 6339(5)  | 1948(4)  | 80(3)   | 1    |
| C(128) | 6071(4)  | 7296(4)  | 1404(4)  | 144(7)  | 1    |
| C(129) | 5793(4)  | 7580(4)  | 926(5)   | 191(11) | 1    |
| C(130) | 5791(4)  | 7182(6)  | 457(4)   | 161(8)  | 1    |
| C(131) | 6068(4)  | 6500(6)  | 466(3)   | 121(5)  | 1    |
| C(132) | 6347(3)  | 6216(4)  | 944(4)   | 106(4)  | 1    |
| C(133) | 6348(3)  | 6614(4)  | 1413(3)  | 91(3)   | 1    |
| C(134) | 7571(5)  | 6145(6)  | 3056(4)  | 91(3)   | 1    |
| C(135) | 7499(3)  | 5261(4)  | 3804(3)  | 96(3)   | 1    |
| C(136) | 7668(3)  | 4634(5)  | 4112(3)  | 126(5)  | 1    |
| C(137) | 8120(3)  | 4216(4)  | 4013(3)  | 99(4)   | 1    |
| C(138) | 8404(3)  | 4424(4)  | 3606(3)  | 86(3)   | 1    |
| C(139) | 8235(3)  | 5051(4)  | 3298(2)  | 85(3)   | 1    |
| C(140) | 7783(3)  | 5470(3)  | 3396(2)  | 77(3)   | 1    |
| C(141) | 4194(10) | 8156(16) | 807(14)  | 207(13) | 0.75 |
| C(142) | 4168(11) | 8084(19) | 1369(9)  | 180(13) | 0.75 |
| O(143) | 4615(7)  | 8371(9)  | 1693(6)  | 148(5)  | 0.75 |
| C(144) | 4832(11) | 8163(13) | 2143(11) | 145(9)  | 0.75 |
| O(145) | 4713(10) | 7552(12) | 2301(7)  | 209(8)  | 0.75 |
| C(146) | 5206(10) | 8656(12) | 2481(9)  | 162(10) | 0.75 |

**Table 3.** Bond lengths [Å] and angles [°] for 1.

|               |           |               |           |
|---------------|-----------|---------------|-----------|
| Mg-N(12)      | 2.008(7)  | Mg-O(1)       | 2.006(7)  |
| Mg-N(17)      | 2.017(7)  | Mg-N(2)       | 2.031(7)  |
| Mg-N(7)       | 2.042(7)  | N(1)-C(2)     | 1.331(11) |
| N(1)-C(20)    | 1.337(11) | C(2)-N(2)     | 1.361(11) |
| C(2)-C(3)     | 1.483(12) | N(2)-C(5)     | 1.352(11) |
| C(3)-C(4)     | 1.334(13) | C(3)-N(21)    | 1.413(9)  |
| C(4)-N(36)    | 1.449(9)  | C(4)-C(5)     | 1.452(12) |
| C(5)-N(6)     | 1.336(11) | N(6)-C(7)     | 1.344(11) |
| C(7)-N(7)     | 1.354(10) | C(7)-C(8)     | 1.489(12) |
| N(7)-C(10)    | 1.368(11) | C(8)-N(51)    | 1.382(8)  |
| C(8)-C(9)     | 1.386(12) | C(9)-C(10)    | 1.430(11) |
| C(9)-N(66)    | 1.446(8)  | C(10)-N(11)   | 1.367(11) |
| N(11)-C(12)   | 1.307(10) | C(12)-N(12)   | 1.390(10) |
| C(12)-C(13)   | 1.475(11) | N(12)-C(15)   | 1.386(10) |
| C(13)-C(14)   | 1.386(11) | C(13)-N(81)   | 1.408(9)  |
| C(14)-N(96)   | 1.416(9)  | C(14)-C(15)   | 1.438(12) |
| C(15)-N(16)   | 1.350(10) | N(16)-C(17)   | 1.331(10) |
| C(17)-N(17)   | 1.391(10) | C(17)-C(18)   | 1.457(11) |
| N(17)-C(20)   | 1.373(10) | C(18)-C(19)   | 1.377(12) |
| C(18)-N(111)  | 1.390(8)  | C(19)-N(126)  | 1.387(8)  |
| C(19)-C(20)   | 1.462(12) | N(21)-C(37)   | 1.40(2)   |
| N(21)-C(22)   | 1.55(2)   | C(22)-C(23)   | 1.53(2)   |
| C(23)-O(24)   | 1.50(2)   | O(24)-C(25)   | 1.40(3)   |
| C(25)-C(26)   | 1.30(4)   | C(26)-O(27)   | 1.36(3)   |
| O(27)-C(28)   | 1.19(3)   | C(28)-C(29)   | 1.39(3)   |
| C(29)-O(30)   | 1.35(2)   | O(30)-C(31)   | 1.33(2)   |
| C(31)-C(32)   | 1.59(3)   | C(32)-O(33)   | 1.47(2)   |
| O(33)-C(34)   | 1.418(13) | C(34)-C(35)   | 1.54(2)   |
| C(35)-N(36)   | 1.456(13) | N(36)-C(44)   | 1.450(14) |
| C(37)-C(43)   | 1.53(2)   | C(44)-C(50)   | 1.50(2)   |
| N(51)-C(67)   | 1.455(11) | N(51)-C(52)   | 1.527(12) |
| C(52)-C(53)   | 1.47(2)   | C(53)-O(54)   | 1.457(12) |
| O(54)-C(55)   | 1.428(11) | C(55)-C(56)   | 1.55(2)   |
| C(56)-O(57)   | 1.379(12) | O(57)-C(58)   | 1.398(13) |
| C(58)-C(59)   | 1.53(2)   | C(59)-O(60)   | 1.403(12) |
| O(60)-C(61)   | 1.400(13) | C(61)-C(62)   | 1.54(2)   |
| C(62)-O(63)   | 1.413(11) | O(63)-C(64)   | 1.403(10) |
| C(64)-C(65)   | 1.505(12) | C(65)-N(66)   | 1.465(11) |
| N(66)-C(74)   | 1.456(11) | C(67)-C(73)   | 1.498(10) |
| C(74)-C(80)   | 1.511(11) | N(81)-C(97)   | 1.450(12) |
| N(81)-C(82)   | 1.472(8)  | C(82)-C(83)   | 1.467(8)  |
| C(83)-O(84)   | 1.375(8)  | O(84)-C(85)   | 1.400(9)  |
| C(85)-C(86)   | 1.440(10) | C(86)-O(87)   | 1.384(9)  |
| O(87)-C(88)   | 1.390(9)  | C(88)-C(89)   | 1.453(10) |
| C(89)-O(90')  | 1.373(11) | C(89)-O(90)   | 1.377(10) |
| O(90)-C(91)   | 1.374(10) | C(91)-C(92)   | 1.451(10) |
| C(92)-O(93)   | 1.376(10) | O(93)-C(94)   | 1.374(11) |
| C(94)-C(95)   | 1.443(11) | C(95)-N(96)   | 1.480(10) |
| O(90')-C(91') | 1.379(10) | C(91')-C(92') | 1.448(10) |
| C(92')-O(93') | 1.375(10) | O(93')-C(94') | 1.386(10) |
| C(94')-C(95') | 1.447(11) | C(95')-N(96)  | 1.479(10) |
| N(96)-C(104)  | 1.49(2)   | C(97)-C(103)  | 1.510(13) |
| C(104)-C(110) | 1.45(2)   | N(111)-C(112) | 1.424(11) |
| N(111)-C(127) | 1.450(11) | C(112)-C(113) | 1.517(13) |
| C(113)-O(114) | 1.400(11) | O(114)-C(115) | 1.423(12) |
| C(115)-C(116) | 1.47(2)   | C(116)-O(117) | 1.389(14) |
| O(117)-C(118) | 1.44(2)   | C(118)-C(119) | 1.51(2)   |
| C(119)-O(120) | 1.39(2)   | O(120)-C(121) | 1.42(2)   |
| C(121)-C(122) | 1.46(2)   | C(122)-O(123) | 1.423(13) |

|                    |           |                    |           |
|--------------------|-----------|--------------------|-----------|
| O(123)-C(124)      | 1.395(13) | C(124)-C(125)      | 1.49(2)   |
| C(125)-N(126)      | 1.442(13) | N(126)-C(134)      | 1.428(13) |
| C(127)-C(133)      | 1.525(12) | C(134)-C(140)      | 1.525(12) |
| <br>               |           |                    |           |
| N(12)-Mg-O(1)      | 104.9(3)  | N(12)-Mg-N(17)     | 85.6(3)   |
| O(1)-Mg-N(17)      | 105.0(3)  | N(12)-Mg-N(2)      | 149.9(3)  |
| O(1)-Mg-N(2)       | 105.2(3)  | N(17)-Mg-N(2)      | 86.1(3)   |
| N(12)-Mg-N(7)      | 87.0(3)   | O(1)-Mg-N(7)       | 106.3(3)  |
| N(17)-Mg-N(7)      | 148.7(3)  | N(2)-Mg-N(7)       | 85.2(3)   |
| C(2)-N(1)-C(20)    | 124.5(7)  | N(1)-C(2)-N(2)     | 126.6(8)  |
| N(1)-C(2)-C(3)     | 123.6(8)  | N(2)-C(2)-C(3)     | 109.8(8)  |
| C(5)-N(2)-C(2)     | 106.7(7)  | C(5)-N(2)-Mg       | 126.7(6)  |
| C(2)-N(2)-Mg       | 126.1(6)  | C(4)-C(3)-N(21)    | 132.8(8)  |
| C(4)-C(3)-C(2)     | 105.3(8)  | N(21)-C(3)-C(2)    | 121.8(8)  |
| C(3)-C(4)-N(36)    | 130.7(8)  | C(3)-C(4)-C(5)     | 108.0(8)  |
| N(36)-C(4)-C(5)    | 121.3(8)  | N(6)-C(5)-N(2)     | 126.7(8)  |
| N(6)-C(5)-C(4)     | 123.0(8)  | N(2)-C(5)-C(4)     | 110.1(8)  |
| C(5)-N(6)-C(7)     | 124.3(7)  | N(7)-C(7)-N(6)     | 125.2(8)  |
| N(7)-C(7)-C(8)     | 110.4(8)  | N(6)-C(7)-C(8)     | 124.3(8)  |
| C(7)-N(7)-C(10)    | 107.1(7)  | C(7)-N(7)-Mg       | 127.5(6)  |
| C(10)-N(7)-Mg      | 124.8(5)  | N(51)-C(8)-C(9)    | 130.8(8)  |
| N(51)-C(8)-C(7)    | 124.8(8)  | C(9)-C(8)-C(7)     | 104.1(7)  |
| C(8)-C(9)-C(10)    | 107.9(7)  | C(8)-C(9)-N(66)    | 126.1(7)  |
| C(10)-C(9)-N(66)   | 125.7(7)  | N(11)-C(10)-N(7)   | 126.7(7)  |
| N(11)-C(10)-C(9)   | 122.8(8)  | N(7)-C(10)-C(9)    | 110.6(8)  |
| C(12)-N(11)-C(10)  | 124.3(7)  | N(11)-C(12)-N(12)  | 126.4(7)  |
| N(11)-C(12)-C(13)  | 123.2(8)  | N(12)-C(12)-C(13)  | 110.1(7)  |
| C(12)-N(12)-C(15)  | 105.9(6)  | C(12)-N(12)-Mg     | 125.5(5)  |
| C(15)-N(12)-Mg     | 128.0(5)  | C(14)-C(13)-N(81)  | 128.4(7)  |
| C(14)-C(13)-C(12)  | 105.4(7)  | N(81)-C(13)-C(12)  | 125.9(7)  |
| C(13)-C(14)-N(96)  | 128.6(7)  | C(13)-C(14)-C(15)  | 107.6(7)  |
| N(96)-C(14)-C(15)  | 123.6(7)  | N(16)-C(15)-N(12)  | 126.0(7)  |
| N(16)-C(15)-C(14)  | 123.2(8)  | N(12)-C(15)-C(14)  | 110.8(7)  |
| C(17)-N(16)-C(15)  | 123.5(7)  | N(16)-C(17)-N(17)  | 125.9(7)  |
| N(16)-C(17)-C(18)  | 123.2(7)  | N(17)-C(17)-C(18)  | 110.9(7)  |
| C(20)-N(17)-C(17)  | 105.7(7)  | C(20)-N(17)-Mg     | 125.1(6)  |
| C(17)-N(17)-Mg     | 127.7(5)  | C(19)-C(18)-N(111) | 127.8(7)  |
| C(19)-C(18)-C(17)  | 105.9(7)  | N(111)-C(18)-C(17) | 126.3(7)  |
| C(18)-C(19)-N(126) | 129.4(7)  | C(18)-C(19)-C(20)  | 106.9(7)  |
| N(126)-C(19)-C(20) | 123.4(8)  | N(1)-C(20)-N(17)   | 125.5(8)  |
| N(1)-C(20)-C(19)   | 123.3(8)  | N(17)-C(20)-C(19)  | 110.6(8)  |
| C(37)-N(21)-C(3)   | 127.3(9)  | C(37)-N(21)-C(22)  | 112.2(10) |
| C(3)-N(21)-C(22)   | 119.1(8)  | C(23)-C(22)-N(21)  | 115.2(12) |
| O(24)-C(23)-C(22)  | 100.2(14) | C(25)-O(24)-C(23)  | 111(2)    |
| O(24)-C(25)-C(26)  | 108(4)    | O(27)-C(26)-C(25)  | 125(4)    |
| C(28)-O(27)-C(26)  | 136(3)    | O(27)-C(28)-C(29)  | 130(3)    |
| O(30)-C(29)-C(28)  | 117(2)    | C(29)-O(30)-C(31)  | 123(2)    |
| O(30)-C(31)-C(32)  | 109(2)    | O(33)-C(32)-C(31)  | 100(2)    |
| C(34)-O(33)-C(32)  | 111.6(14) | O(33)-C(34)-C(35)  | 107.2(12) |
| N(36)-C(35)-C(34)  | 116.0(10) | C(44)-N(36)-C(4)   | 119.7(8)  |
| C(44)-N(36)-C(35)  | 115.9(9)  | C(4)-N(36)-C(35)   | 116.7(7)  |
| N(21)-C(37)-C(43)  | 120(2)    | C(42)-C(43)-C(37)  | 109.2(14) |
| C(38)-C(43)-C(37)  | 130.0(13) | N(36)-C(44)-C(50)  | 107.5(11) |
| C(49)-C(50)-C(44)  | 119.3(10) | C(45)-C(50)-C(44)  | 120.7(10) |
| C(8)-N(51)-C(67)   | 121.0(6)  | C(8)-N(51)-C(52)   | 123.9(6)  |
| C(67)-N(51)-C(52)  | 113.4(7)  | C(53)-C(52)-N(51)  | 111.8(9)  |
| O(54)-C(53)-C(52)  | 114.0(10) | C(55)-O(54)-C(53)  | 114.2(8)  |
| O(54)-C(55)-C(56)  | 109.6(9)  | O(57)-C(56)-C(55)  | 107.8(9)  |
| C(56)-O(57)-C(58)  | 111.6(9)  | O(57)-C(58)-C(59)  | 110.6(9)  |
| O(60)-C(59)-C(58)  | 106.6(10) | C(61)-O(60)-C(59)  | 111.9(10) |
| O(60)-C(61)-C(62)  | 107.3(9)  | O(63)-C(62)-C(61)  | 106.7(8)  |
| C(62)-O(63)-C(64)  | 109.8(7)  | O(63)-C(64)-C(65)  | 108.9(7)  |

|                      |           |                      |           |
|----------------------|-----------|----------------------|-----------|
| N(66)-C(65)-C(64)    | 115.2(7)  | C(9)-N(66)-C(74)     | 114.3(6)  |
| C(9)-N(66)-C(65)     | 110.2(6)  | C(74)-N(66)-C(65)    | 114.2(8)  |
| N(51)-C(67)-C(73)    | 113.4(7)  | C(72)-C(73)-C(67)    | 122.2(5)  |
| C(68)-C(73)-C(67)    | 117.8(5)  | N(66)-C(74)-C(80)    | 115.1(7)  |
| C(79)-C(80)-C(74)    | 121.8(8)  | C(75)-C(80)-C(74)    | 118.2(8)  |
| C(13)-N(81)-C(97)    | 120.9(6)  | C(13)-N(81)-C(82)    | 121.6(6)  |
| C(97)-N(81)-C(82)    | 117.2(8)  | C(83)-C(82)-N(81)    | 114.6(8)  |
| O(84)-C(83)-C(82)    | 114.8(9)  | C(83)-O(84)-C(85)    | 114.1(9)  |
| O(84)-C(85)-C(86)    | 114.9(11) | O(87)-C(86)-C(85)    | 114.0(12) |
| C(86)-O(87)-C(88)    | 112.1(12) | O(87)-C(88)-C(89)    | 112.4(13) |
| O(90')-C(89)-C(88)   | 111(2)    | O(90)-C(89)-C(88)    | 110(2)    |
| C(91)-O(90)-C(89)    | 116(2)    | O(90)-C(91)-C(92)    | 110(2)    |
| O(93)-C(92)-C(91)    | 113(2)    | C(94)-O(93)-C(92)    | 112(2)    |
| O(93)-C(94)-C(95)    | 112(2)    | C(94)-C(95)-N(96)    | 113(2)    |
| C(89)-O(90')-C(91')  | 112(2)    | O(90')-C(91')-C(92') | 109(2)    |
| O(93')-C(92')-C(91') | 110(2)    | C(92')-O(93')-C(94') | 111(2)    |
| O(93')-C(94')-C(95') | 108(2)    | C(94')-C(95')-N(96)  | 113(2)    |
| C(14)-N(96)-C(95)    | 125(3)    | C(14)-N(96)-C(95')   | 107(2)    |
| C(14)-N(96)-C(104)   | 115.3(11) | C(95)-N(96)-C(104)   | 117(3)    |
| C(95')-N(96)-C(104)  | 137(2)    | N(81)-C(97)-C(103)   | 115.0(8)  |
| C(102)-C(103)-C(97)  | 121.3(7)  | C(98)-C(103)-C(97)   | 118.7(7)  |
| C(110)-C(104)-N(96)  | 112.3(11) | C(109)-C(110)-C(104) | 116.3(13) |
| C(105)-C(110)-C(104) | 123.7(13) | C(18)-N(111)-C(112)  | 121.2(6)  |
| C(18)-N(111)-C(127)  | 119.4(7)  | C(112)-N(111)-C(127) | 119.3(7)  |
| N(111)-C(112)-C(113) | 114.9(8)  | O(114)-C(113)-C(112) | 110.2(8)  |
| C(113)-O(114)-C(115) | 113.9(8)  | O(114)-C(115)-C(116) | 107.2(9)  |
| O(117)-C(116)-C(115) | 111.6(10) | C(116)-O(117)-C(118) | 110.3(12) |
| O(117)-C(118)-C(119) | 109.4(14) | O(120)-C(119)-C(118) | 108.6(12) |
| C(119)-O(120)-C(121) | 110.6(12) | O(120)-C(121)-C(122) | 109.3(10) |
| O(123)-C(122)-C(121) | 109.7(12) | C(124)-O(123)-C(122) | 113.3(11) |
| O(123)-C(124)-C(125) | 107.6(10) | N(126)-C(125)-C(124) | 115.1(9)  |
| C(19)-N(126)-C(134)  | 120.8(7)  | C(19)-N(126)-C(125)  | 119.9(8)  |
| C(134)-N(126)-C(125) | 119.1(8)  | N(111)-C(127)-C(133) | 114.8(8)  |
| C(132)-C(133)-C(127) | 122.5(7)  | C(128)-C(133)-C(127) | 117.5(7)  |
| N(126)-C(134)-C(140) | 114.9(8)  | C(139)-C(140)-C(134) | 121.7(6)  |
| C(135)-C(140)-C(134) | 118.2(6)  |                      |           |

**Table 4. Anisotropic displacement parameters [Å<sup>2</sup> × 10<sup>3</sup>] for 1.**

The anisotropic displacement factor exponent takes the form:

$$-2\pi^2 [ (ha^*)^2 U_{11} + \dots + 2hka^* b^* U_{12} ]$$

|       | U11     | U22     | U33     | U23     | U13      | U12      |
|-------|---------|---------|---------|---------|----------|----------|
| Mg    | 48(1)   | 63(2)   | 46(1)   | 1(1)    | 7(1)     | 3(1)     |
| O(1)  | 59(4)   | 81(4)   | 69(4)   | 13(3)   | 4(3)     | -2(3)    |
| N(1)  | 63(5)   | 58(4)   | 60(4)   | -4(3)   | 4(4)     | 0(4)     |
| C(2)  | 58(5)   | 71(6)   | 53(5)   | -2(5)   | 2(4)     | -9(5)    |
| N(2)  | 48(4)   | 72(5)   | 48(4)   | 6(3)    | 5(3)     | -3(3)    |
| C(3)  | 86(7)   | 78(6)   | 49(5)   | 8(5)    | -4(5)    | -3(5)    |
| C(4)  | 65(6)   | 104(8)  | 45(5)   | 5(5)    | -1(4)    | 1(5)     |
| C(5)  | 59(6)   | 67(6)   | 58(5)   | 5(4)    | 5(4)     | 3(5)     |
| N(6)  | 55(4)   | 88(5)   | 44(4)   | 13(4)   | 5(3)     | 8(4)     |
| C(7)  | 49(5)   | 69(6)   | 56(5)   | 13(4)   | 17(4)    | 6(4)     |
| N(7)  | 48(4)   | 68(5)   | 46(4)   | 2(3)    | 10(3)    | 6(3)     |
| C(8)  | 57(5)   | 51(5)   | 75(6)   | 21(4)   | 21(5)    | 6(4)     |
| C(9)  | 51(5)   | 61(5)   | 58(5)   | 1(4)    | 26(4)    | 5(4)     |
| C(10) | 64(6)   | 65(6)   | 52(5)   | 8(4)    | 17(4)    | 4(4)     |
| N(11) | 57(4)   | 66(5)   | 52(4)   | -1(3)   | 19(3)    | 10(4)    |
| C(12) | 49(5)   | 60(5)   | 55(5)   | -1(4)   | 13(4)    | 7(4)     |
| N(12) | 45(4)   | 63(4)   | 48(4)   | -3(3)   | 11(3)    | -2(3)    |
| C(13) | 55(5)   | 69(6)   | 63(5)   | -9(4)   | 12(4)    | -8(4)    |
| C(14) | 47(5)   | 99(7)   | 70(6)   | -32(5)  | 26(4)    | -19(5)   |
| C(15) | 61(5)   | 60(5)   | 53(5)   | -3(4)   | 7(4)     | -2(4)    |
| N(16) | 50(4)   | 62(4)   | 64(4)   | -12(4)  | 15(3)    | -3(3)    |
| C(17) | 56(5)   | 50(5)   | 60(5)   | 2(4)    | 25(4)    | 5(4)     |
| N(17) | 66(5)   | 54(4)   | 52(4)   | -3(3)   | 13(3)    | 6(3)     |
| C(18) | 68(6)   | 56(5)   | 52(5)   | -1(4)   | 20(4)    | 4(4)     |
| C(19) | 78(6)   | 59(5)   | 56(5)   | -7(4)   | 21(5)    | 5(5)     |
| C(20) | 68(6)   | 58(5)   | 50(5)   | -1(4)   | 11(4)    | -1(4)    |
| N(21) | 96(6)   | 138(8)  | 53(5)   | -13(5)  | -14(4)   | -42(6)   |
| C(22) | 105(10) | 178(15) | 83(8)   | -19(9)  | 6(7)     | -16(10)  |
| C(23) | 153(14) | 125(12) | 112(10) | 12(9)   | 11(10)   | 6(11)    |
| O(24) | 219(10) | 235(10) | 247(10) | 48(8)   | 12(8)    | -13(8)   |
| C(25) | 242(31) | 279(36) | 415(46) | -37(33) | -163(32) | 128(28)  |
| C(26) | 260(32) | 225(29) | 241(30) | 92(24)  | 49(26)   | -44(24)  |
| O(27) | 249(20) | 265(20) | 218(17) | 54(15)  | -110(16) | -112(17) |
| C(28) | 198(26) | 226(29) | 250(32) | 8(25)   | -47(23)  | -40(22)  |
| C(29) | 164(13) | 133(12) | 132(12) | -21(10) | -32(10)  | -34(11)  |
| O(30) | 232(14) | 342(21) | 103(9)  | -82(11) | 30(9)    | -138(14) |
| C(31) | 276(26) | 336(32) | 87(11)  | -44(15) | 22(14)   | -211(25) |
| C(32) | 245(24) | 227(24) | 146(16) | -76(17) | -23(15)  | -72(20)  |
| O(33) | 128(7)  | 213(12) | 96(6)   | -31(7)  | 5(5)     | -49(8)   |
| C(34) | 78(7)   | 171(14) | 59(6)   | -38(7)  | -5(5)    | -23(8)   |
| C(35) | 60(6)   | 149(11) | 58(6)   | -1(7)   | 2(5)     | -1(7)    |
| N(36) | 57(5)   | 183(10) | 43(4)   | 8(5)    | -11(4)   | -9(5)    |
| C(37) | 193(17) | 164(15) | 113(11) | -57(11) | 55(11)   | -25(13)  |
| C(38) | 324(33) | 188(24) | 233(28) | 33(21)  | 46(25)   | 111(24)  |
| C(39) | 407(43) | 88(12)  | 257(27) | -25(15) | 122(29)  | 25(19)   |
| C(40) | 324(38) | 219(29) | 507(56) | 155(36) | 82(39)   | 185(29)  |
| C(41) | 353(27) | 359(27) | 359(27) | 0(10)   | 53(11)   | -5(10)   |
| C(42) | 237(24) | 170(20) | 283(27) | 63(19)  | -134(22) | 12(18)   |
| C(43) | 262(22) | 124(12) | 74(8)   | -23(8)  | 15(11)   | 85(13)   |
| C(44) | 117(10) | 118(10) | 106(9)  | -14(8)  | 0(8)     | -7(8)    |
| C(45) | 130(15) | 305(30) | 201(20) | -40(20) | -44(14)  | 88(18)   |
| C(46) | 179(15) | 265(19) | 239(17) | 4(16)   | -47(13)  | 50(15)   |
| C(47) | 290(19) | 289(19) | 295(19) | -4(10)  | 36(10)   | 20(10)   |

|        |         |         |         |          |         |         |
|--------|---------|---------|---------|----------|---------|---------|
| C(48)  | 324(41) | 174(22) | 288(31) | -70(22)  | 90(30)  | 64(23)  |
| C(49)  | 277(27) | 108(13) | 230(22) | -56(14)  | 46(19)  | 33(16)  |
| C(50)  | 100(10) | 164(14) | 104(10) | -5(9)    | -14(8)  | 46(10)  |
| N(51)  | 43(4)   | 57(4)   | 78(5)   | -7(4)    | 9(3)    | -2(3)   |
| C(52)  | 69(6)   | 96(8)   | 94(8)   | 1(6)     | 8(6)    | 6(6)    |
| C(53)  | 89(7)   | 116(9)  | 69(7)   | 9(6)     | 21(6)   | 1(7)    |
| O(54)  | 72(4)   | 101(5)  | 83(5)   | 16(4)    | -12(4)  | -2(4)   |
| C(55)  | 69(7)   | 112(9)  | 104(8)  | -19(7)   | -15(6)  | 21(6)   |
| C(56)  | 62(6)   | 103(9)  | 102(8)  | 18(7)    | -5(6)   | -5(6)   |
| O(57)  | 75(4)   | 82(5)   | 103(5)  | -2(4)    | 11(4)   | 3(4)    |
| C(58)  | 65(7)   | 101(9)  | 112(9)  | 10(7)    | 5(6)    | 2(6)    |
| C(59)  | 77(8)   | 129(11) | 128(10) | -2(9)    | 21(7)   | 42(8)   |
| O(60)  | 72(5)   | 104(6)  | 129(6)  | -23(5)   | 12(4)   | 12(4)   |
| C(61)  | 88(8)   | 103(9)  | 109(9)  | -34(7)   | 30(7)   | 18(7)   |
| C(62)  | 83(7)   | 89(7)   | 82(7)   | -19(6)   | 16(6)   | -11(6)  |
| O(63)  | 66(4)   | 84(4)   | 65(4)   | -11(3)   | 15(3)   | -5(3)   |
| C(64)  | 65(6)   | 76(6)   | 54(5)   | 8(5)     | 7(4)    | 0(5)    |
| C(65)  | 71(6)   | 66(6)   | 65(6)   | 6(5)     | 2(5)    | 6(5)    |
| N(66)  | 59(4)   | 61(4)   | 65(4)   | 6(4)     | 18(3)   | 0(4)    |
| C(67)  | 51(5)   | 65(6)   | 74(6)   | 3(5)     | 12(4)   | 1(4)    |
| C(68)  | 108(9)  | 87(8)   | 93(8)   | 15(6)    | 35(7)   | 28(7)   |
| C(69)  | 161(12) | 66(7)   | 118(10) | 25(7)    | 43(9)   | 33(7)   |
| C(70)  | 115(9)  | 71(8)   | 100(9)  | 27(6)    | -1(7)   | 4(7)    |
| C(71)  | 120(9)  | 85(8)   | 83(7)   | 30(6)    | 33(7)   | -6(7)   |
| C(72)  | 96(8)   | 81(7)   | 84(7)   | -4(6)    | 22(6)   | -6(6)   |
| C(73)  | 45(4)   | 56(5)   | 70(6)   | 0(4)     | 14(4)   | -4(4)   |
| C(74)  | 78(7)   | 66(6)   | 126(9)  | -10(6)   | 50(6)   | -1(5)   |
| C(75)  | 119(10) | 79(8)   | 128(10) | -32(8)   | 26(8)   | -15(7)  |
| C(76)  | 182(17) | 119(12) | 146(13) | -55(11)  | 68(12)  | -40(12) |
| C(77)  | 112(12) | 105(12) | 289(24) | -70(14)  | 108(15) | -12(10) |
| C(78)  | 113(13) | 78(11)  | 510(45) | -55(17)  | 108(20) | 5(9)    |
| C(79)  | 98(10)  | 66(8)   | 273(21) | 2(10)    | 1(11)   | -10(7)  |
| C(80)  | 78(7)   | 72(7)   | 101(8)  | 3(6)     | 55(6)   | -3(6)   |
| N(81)  | 71(5)   | 83(5)   | 79(5)   | -31(4)   | 31(4)   | -19(4)  |
| C(82)  | 65(6)   | 90(7)   | 77(6)   | -17(5)   | 19(5)   | 8(5)    |
| C(83)  | 121(10) | 122(11) | 88(8)   | 9(8)     | 0(7)    | 31(9)   |
| O(84)  | 125(7)  | 124(7)  | 134(8)  | 10(6)    | 23(6)   | -3(6)   |
| C(85)  | 184(17) | 180(17) | 128(13) | 67(12)   | -2(12)  | 69(14)  |
| C(86)  | 185(19) | 361(36) | 108(13) | 52(18)   | -35(13) | 93(21)  |
| O(87)  | 158(10) | 196(12) | 161(10) | -36(9)   | -12(8)  | 19(9)   |
| C(88)  | 186(15) | 200(16) | 253(17) | -19(14)  | 50(14)  | 19(14)  |
| C(89)  | 328(11) | 325(12) | 349(11) | 19(9)    | 45(8)   | -7(9)   |
| O(90)  | 329(12) | 322(13) | 355(13) | 25(11)   | 42(11)  | -6(11)  |
| C(91)  | 327(13) | 321(13) | 353(13) | 24(11)   | 41(11)  | -8(11)  |
| C(92)  | 328(13) | 322(13) | 355(13) | 23(11)   | 41(11)  | -10(11) |
| O(93)  | 329(13) | 320(13) | 355(13) | 24(11)   | 40(11)  | -5(11)  |
| C(94)  | 328(13) | 321(13) | 354(13) | 24(11)   | 42(11)  | -12(11) |
| C(95)  | 325(13) | 321(13) | 354(13) | 23(11)   | 42(11)  | -8(11)  |
| O(90') | 331(12) | 322(13) | 357(13) | 26(11)   | 41(11)  | -7(11)  |
| C(91') | 324(13) | 319(13) | 353(13) | 24(11)   | 44(11)  | -11(11) |
| C(92') | 326(13) | 321(13) | 355(13) | 24(11)   | 41(11)  | -10(11) |
| O(93') | 331(12) | 320(13) | 354(13) | 23(11)   | 42(11)  | -10(11) |
| C(94') | 330(13) | 323(13) | 355(13) | 24(11)   | 40(11)  | -9(11)  |
| C(95') | 324(13) | 320(13) | 354(13) | 23(11)   | 43(11)  | -8(11)  |
| N(96)  | 81(6)   | 258(15) | 124(8)  | -117(10) | 50(6)   | -73(8)  |
| C(97)  | 67(6)   | 87(8)   | 100(8)  | -32(6)   | 19(5)   | -13(6)  |
| C(98)  | 186(17) | 127(13) | 187(17) | -71(12)  | -58(13) | 49(12)  |
| C(99)  | 195(19) | 116(13) | 248(23) | -67(14)  | -58(17) | 24(13)  |
| C(100) | 133(13) | 120(13) | 150(13) | 4(11)    | 47(11)  | 26(10)  |
| C(101) | 129(11) | 76(8)   | 129(11) | 5(8)     | 47(8)   | -24(8)  |
| C(102) | 125(10) | 85(8)   | 86(8)   | -7(6)    | 30(7)   | -42(8)  |
| C(103) | 90(8)   | 90(8)   | 92(8)   | -37(6)   | 34(6)   | -36(7)  |

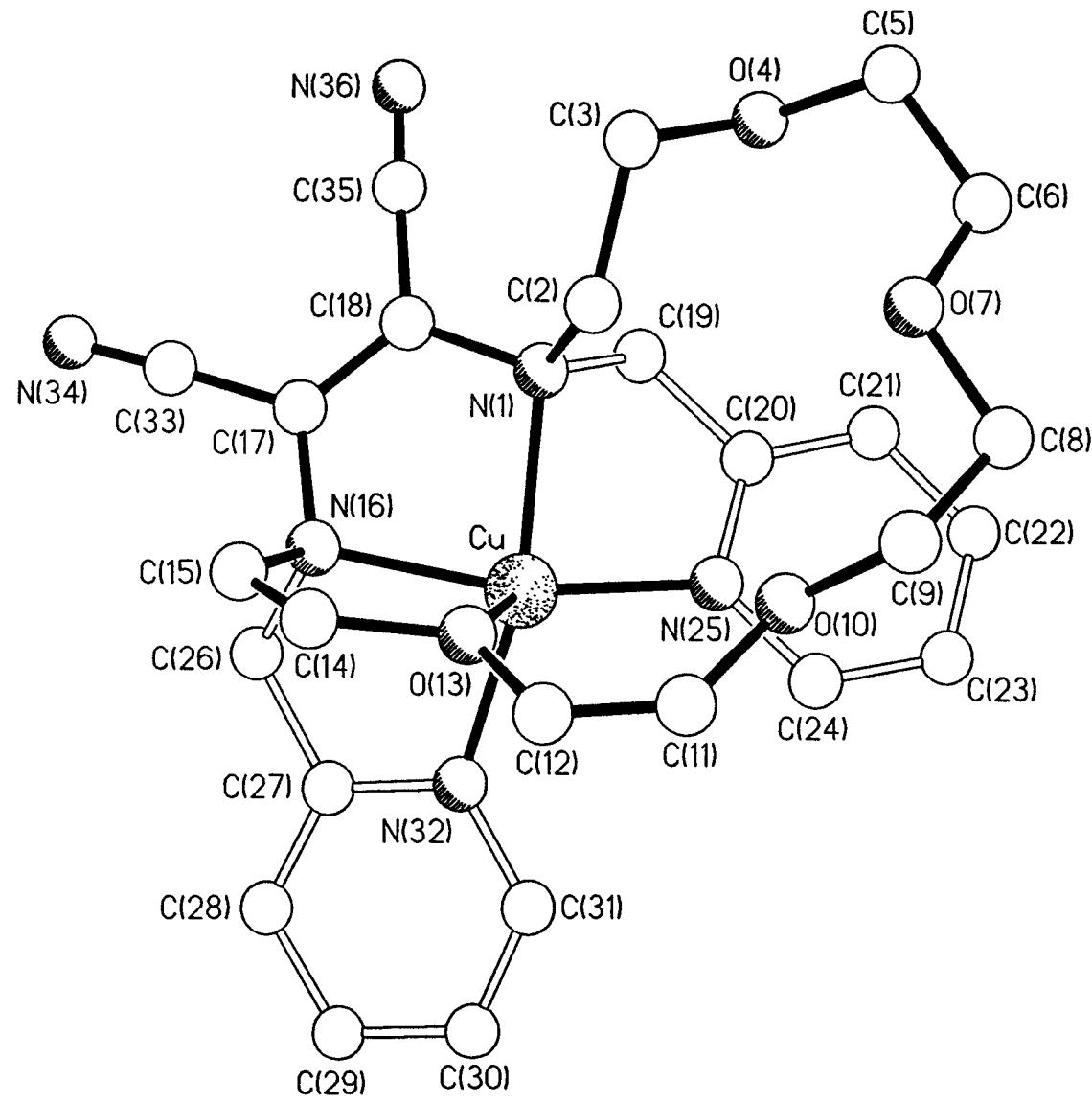
|        |         |         |         |          |         |          |
|--------|---------|---------|---------|----------|---------|----------|
| C(104) | 149(13) | 273(21) | 202(16) | -165(16) | 138(13) | -145(15) |
| C(105) | 113(14) | 179(20) | 508(45) | 56(25)   | -76(20) | -54(14)  |
| C(106) | 267(17) | 262(17) | 272(17) | 6(10)    | 19(10)  | -1(10)   |
| C(107) | 351(40) | 173(23) | 195(22) | -22(19)  | -31(26) | -49(27)  |
| C(108) | 393(44) | 264(32) | 110(16) | 113(20)  | 132(22) | 151(28)  |
| C(109) | 111(11) | 286(27) | 99(11)  | 50(16)   | 32(9)   | 30(17)   |
| C(110) | 74(9)   | 187(16) | 128(11) | -45(11)  | 7(8)    | 5(10)    |
| N(111) | 63(4)   | 55(4)   | 79(5)   | -8(4)    | 26(4)   | 5(4)     |
| C(112) | 62(6)   | 74(6)   | 80(6)   | -26(5)   | 22(5)   | 2(5)     |
| C(113) | 81(7)   | 71(6)   | 89(7)   | -14(5)   | 23(6)   | 3(5)     |
| O(114) | 79(4)   | 83(5)   | 93(5)   | -6(4)    | 36(4)   | 7(4)     |
| C(115) | 114(9)  | 101(9)  | 105(8)  | 17(7)    | 67(8)   | 0(7)     |
| C(116) | 112(9)  | 115(10) | 104(9)  | -10(8)   | 58(8)   | -15(9)   |
| O(117) | 140(7)  | 96(6)   | 92(5)   | -14(4)   | 43(5)   | 10(6)    |
| C(118) | 197(17) | 124(12) | 109(11) | -18(9)   | 67(11)  | 46(13)   |
| C(119) | 214(18) | 118(12) | 92(10)  | -29(9)   | 10(11)  | 49(13)   |
| O(120) | 122(6)  | 89(6)   | 102(6)  | -22(5)   | 14(5)   | 22(5)    |
| C(121) | 119(11) | 61(8)   | 172(14) | -41(8)   | -4(10)  | 3(7)     |
| C(122) | 118(10) | 54(7)   | 132(11) | -23(7)   | -14(8)  | 3(7)     |
| O(123) | 103(6)  | 67(5)   | 132(7)  | -21(4)   | 9(5)    | 17(4)    |
| C(124) | 115(9)  | 49(6)   | 158(12) | -19(7)   | 41(9)   | -2(6)    |
| C(125) | 79(7)   | 85(8)   | 117(9)  | -33(7)   | 19(6)   | -2(6)    |
| N(126) | 99(6)   | 58(5)   | 79(5)   | -21(4)   | 25(5)   | 2(4)     |
| C(127) | 80(7)   | 64(6)   | 104(8)  | 8(6)     | 43(6)   | 12(5)    |
| C(128) | 88(9)   | 93(9)   | 222(18) | -19(10)  | -58(10) | 30(8)    |
| C(129) | 109(12) | 82(10)  | 338(30) | -2(14)   | -92(16) | -6(9)    |
| C(130) | 80(9)   | 136(14) | 245(23) | 86(15)   | -42(11) | -20(10)  |
| C(131) | 87(9)   | 145(13) | 128(11) | 50(10)   | 13(8)   | 1(9)     |
| C(132) | 90(8)   | 119(10) | 111(10) | 19(9)    | 25(7)   | 17(8)    |
| C(133) | 54(6)   | 61(7)   | 154(11) | 15(7)    | 10(7)   | -6(5)    |
| C(134) | 124(9)  | 81(7)   | 72(7)   | -14(6)   | 30(6)   | 34(7)    |
| C(135) | 86(8)   | 118(10) | 86(8)   | 10(7)    | 24(6)   | 6(7)     |
| C(136) | 123(11) | 136(12) | 133(11) | 39(10)   | 59(9)   | 12(10)   |
| C(137) | 91(8)   | 78(8)   | 129(10) | 16(7)    | 22(7)   | -8(6)    |
| C(138) | 101(8)  | 70(7)   | 84(7)   | -5(6)    | 3(6)    | 0(6)     |
| C(139) | 110(8)  | 86(8)   | 62(6)   | -19(6)   | 20(6)   | 0(6)     |
| C(140) | 86(7)   | 83(7)   | 62(6)   | -29(5)   | 16(5)   | 8(6)     |
| C(141) | 129(20) | 198(27) | 288(40) | 7(27)    | 12(22)  | -57(19)  |
| C(142) | 176(23) | 288(36) | 82(14)  | -27(18)  | 37(15)  | -77(23)  |
| O(143) | 180(14) | 151(12) | 111(10) | 26(10)   | 16(10)  | -42(11)  |
| C(144) | 173(21) | 111(16) | 148(21) | 78(16)   | 15(17)  | 19(15)   |
| O(145) | 294(24) | 180(17) | 150(14) | 19(14)   | 25(14)  | -22(17)  |
| C(146) | 164(19) | 114(15) | 175(21) | -36(15)  | -67(17) | 19(14)   |

**Table 5. Hydrogen coordinates ( $\times 10^4$ ), isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) and site occupancy factors for 1.**

|        | x         | y        | z        | U(eq) | sof |
|--------|-----------|----------|----------|-------|-----|
| H(22A) | 9624(5)   | 6230(10) | 3623(5)  | 148   | 1   |
| H(22B) | 9330(5)   | 5628(10) | 3228(5)  | 148   | 1   |
| H(23A) | 9709(7)   | 4970(9)  | 3985(6)  | 157   | 1   |
| H(23B) | 10103(7)  | 4781(9)  | 3568(6)  | 157   | 1   |
| H(25A) | 10885(14) | 4710(21) | 4236(15) | 404   | 1   |
| H(25B) | 10590(14) | 4947(21) | 4715(15) | 404   | 1   |
| H(26A) | 11105(14) | 5818(18) | 4919(12) | 290   | 1   |
| H(26B) | 11480(14) | 5150(18) | 4813(12) | 290   | 1   |
| H(28A) | 12211(12) | 6010(18) | 4565(12) | 281   | 1   |
| H(28B) | 11861(12) | 6619(18) | 4788(12) | 281   | 1   |
| H(29A) | 12094(8)  | 7382(11) | 4329(7)  | 179   | 1   |
| H(29B) | 12514(8)  | 6794(11) | 4174(7)  | 179   | 1   |
| H(31A) | 12446(10) | 7087(15) | 3218(7)  | 281   | 1   |
| H(31B) | 12230(10) | 7838(15) | 3435(7)  | 281   | 1   |
| H(32A) | 11317(10) | 7574(14) | 2830(8)  | 255   | 1   |
| H(32B) | 11805(10) | 7801(14) | 2521(8)  | 255   | 1   |
| H(34A) | 11431(5)  | 6826(9)  | 1781(4)  | 126   | 1   |
| H(34B) | 10946(5)  | 6804(9)  | 2119(4)  | 126   | 1   |
| H(35A) | 11055(4)  | 5665(8)  | 1606(4)  | 108   | 1   |
| H(35B) | 11597(4)  | 5512(8)  | 2011(4)  | 108   | 1   |
| H(37A) | 10708(8)  | 6596(10) | 2932(6)  | 184   | 1   |
| H(37B) | 10652(8)  | 6344(10) | 3506(6)  | 184   | 1   |
| H(38A) | 10905(6)  | 7708(9)  | 3928(5)  | 298   | 1   |
| H(39A) | 10480(13) | 8821(11) | 4107(8)  | 292   | 1   |
| H(40A) | 9634(13)  | 9158(10) | 3608(12) | 418   | 1   |
| H(41A) | 9214(8)   | 8382(17) | 2929(12) | 429   | 1   |
| H(42A) | 9639(11)  | 7268(13) | 2750(8)  | 300   | 1   |
| H(44A) | 10908(6)  | 5079(8)  | 3079(5)  | 139   | 1   |
| H(44B) | 11356(6)  | 5686(8)  | 2999(5)  | 139   | 1   |
| H(45A) | 12243(5)  | 5162(8)  | 3306(5)  | 264   | 1   |
| H(46A) | 12892(5)  | 4213(16) | 3302(10) | 284   | 1   |
| H(47A) | 12642(10) | 3101(12) | 2853(11) | 351   | 1   |
| H(48A) | 11742(12) | 2938(8)  | 2408(10) | 309   | 1   |
| H(49A) | 11092(6)  | 3887(12) | 2413(8)  | 245   | 1   |
| H(52A) | 11036(4)  | 4240(6)  | 1334(4)  | 104   | 1   |
| H(52B) | 11482(4)  | 3684(6)  | 1181(4)  | 104   | 1   |
| H(53A) | 11159(5)  | 4999(7)  | 626(4)   | 109   | 1   |
| H(53B) | 11700(5)  | 4929(7)  | 1047(4)  | 109   | 1   |
| H(55A) | 12288(4)  | 3748(7)  | 815(5)   | 118   | 1   |
| H(55B) | 12525(4)  | 4553(7)  | 737(5)   | 118   | 1   |
| H(56A) | 12564(4)  | 4240(7)  | -178(5)  | 109   | 1   |
| H(56B) | 12955(4)  | 3715(7)  | 215(5)   | 109   | 1   |
| H(58A) | 12846(4)  | 2835(7)  | -490(5)  | 113   | 1   |
| H(58B) | 12424(4)  | 3369(7)  | -840(5)  | 113   | 1   |
| H(59A) | 12289(5)  | 2057(8)  | -1079(5) | 133   | 1   |
| H(59B) | 12096(5)  | 1928(8)  | -526(5)  | 133   | 1   |
| H(61A) | 11186(5)  | 1648(7)  | -878(5)  | 118   | 1   |
| H(61B) | 11346(5)  | 1679(7)  | -1451(5) | 118   | 1   |
| H(62A) | 10682(4)  | 2668(6)  | -1683(4) | 102   | 1   |
| H(62B) | 10381(4)  | 1944(6)  | -1518(4) | 102   | 1   |
| H(64A) | 9688(4)   | 2643(5)  | -1231(3) | 78    | 1   |
| H(64B) | 9960(4)   | 3368(5)  | -1427(3) | 78    | 1   |
| H(65A) | 10062(4)  | 3874(5)  | -575(3)  | 82    | 1   |
| H(65B) | 9435(4)   | 3707(5)  | -787(3)  | 82    | 1   |
| H(67A) | 11283(4)  | 3027(5)  | 327(4)   | 76    | 1   |

|        |          |          |           |     |      |
|--------|----------|----------|-----------|-----|------|
| H(67B) | 10665(4) | 2780(5)  | 148(4)    | 76  | 1    |
| H(68A) | 11420(3) | 1643(4)  | 414(2)    | 113 | 1    |
| H(69A) | 11562(5) | 664(4)   | 1020(5)   | 135 | 1    |
| H(70A) | 11238(5) | 755(5)   | 1823(4)   | 117 | 1    |
| H(71A) | 10771(5) | 1825(6)  | 2021(3)   | 113 | 1    |
| H(72A) | 10629(4) | 2805(4)  | 1415(4)   | 103 | 1    |
| H(74A) | 9011(4)  | 2649(5)  | -498(5)   | 104 | 1    |
| H(74B) | 9222(4)  | 2351(5)  | 77(5)     | 104 | 1    |
| H(75A) | 8829(3)  | 1666(5)  | -1069(3)  | 129 | 1    |
| H(76A) | 9058(7)  | 538(8)   | -1431(4)  | 173 | 1    |
| H(77A) | 9869(7)  | -80(5)   | -1072(7)  | 192 | 1    |
| H(78A) | 10451(5) | 430(7)   | -350(8)   | 273 | 1    |
| H(79A) | 10222(5) | 1559(7)  | 12(5)     | 179 | 1    |
| H(82A) | 8139(3)  | 3676(6)  | -832(3)   | 92  | 1    |
| H(82B) | 8041(3)  | 2825(6)  | -967(3)   | 92  | 1    |
| H(83A) | 7637(5)  | 3365(6)  | -1689(4)  | 135 | 1    |
| H(83B) | 7136(5)  | 3190(6)  | -1397(4)  | 135 | 1    |
| H(85A) | 6605(7)  | 4114(8)  | -1872(6)  | 200 | 1    |
| H(85B) | 7096(7)  | 4281(8)  | -2180(6)  | 200 | 1    |
| H(86A) | 6610(8)  | 5329(9)  | -1605(6)  | 270 | 1    |
| H(86B) | 7106(8)  | 5498(9)  | -1906(6)  | 270 | 1    |
| H(88A) | 5773(7)  | 6032(10) | -2521(9)  | 254 | 1    |
| H(88B) | 5987(7)  | 5918(10) | -1912(9)  | 254 | 1    |
| H(89A) | 5126(8)  | 5328(16) | -2280(10) | 402 | 0.50 |
| H(89B) | 5493(8)  | 4740(16) | -2522(10) | 402 | 0.50 |
| H(89C) | 5291(8)  | 5031(16) | -2589(10) | 402 | 0.50 |
| H(89D) | 5233(8)  | 5317(16) | -2032(10) | 402 | 0.50 |
| H(91A) | 4944(27) | 5125(29) | -1504(12) | 403 | 0.50 |
| H(91B) | 5510(27) | 5464(29) | -1222(12) | 403 | 0.50 |
| H(92A) | 4969(17) | 4351(28) | -882(12)  | 404 | 0.50 |
| H(92B) | 5504(17) | 3996(28) | -1044(12) | 404 | 0.50 |
| H(94A) | 6413(17) | 4975(29) | -228(21)  | 403 | 0.50 |
| H(94B) | 6296(17) | 4657(29) | -809(21)  | 403 | 0.50 |
| H(95A) | 6575(22) | 3612(25) | -514(14)  | 401 | 0.50 |
| H(95B) | 6064(22) | 3565(25) | -216(14)  | 401 | 0.50 |
| H(91C) | 5218(17) | 3671(25) | -1844(12) | 400 | 0.50 |
| H(91D) | 4873(17) | 4418(25) | -1863(12) | 400 | 0.50 |
| H(92C) | 5260(13) | 4672(32) | -1001(12) | 403 | 0.50 |
| H(92D) | 4954(13) | 3894(32) | -1036(12) | 403 | 0.50 |
| H(94C) | 5778(19) | 3891(40) | -148(16)  | 405 | 0.50 |
| H(94D) | 5875(19) | 4660(40) | -421(16)  | 405 | 0.50 |
| H(95C) | 6733(14) | 4428(46) | -440(8)   | 401 | 0.50 |
| H(95D) | 6635(14) | 3562(46) | -505(8)   | 401 | 0.50 |
| H(97A) | 7027(4)  | 2456(6)  | -729(4)   | 101 | 1    |
| H(97B) | 7035(4)  | 2602(6)  | -123(4)   | 101 | 1    |
| H(98A) | 7095(4)  | 1162(5)  | -779(4)   | 212 | 1    |
| H(99A) | 7592(7)  | 57(5)    | -596(6)   | 236 | 1    |
| H(10A) | 8393(6)  | 47(6)    | 34(6)     | 158 | 1    |
| H(10B) | 8698(4)  | 1142(8)  | 480(4)    | 130 | 1    |
| H(10C) | 8201(5)  | 2246(5)  | 297(5)    | 116 | 1    |
| H(10D) | 6847(7)  | 3578(11) | 1031(7)   | 235 | 1    |
| H(10E) | 6285(7)  | 3992(11) | 833(7)    | 235 | 1    |
| H(10F) | 5466(4)  | 3249(8)  | 486(7)    | 337 | 1    |
| H(10G) | 5075(5)  | 2064(15) | 348(11)   | 324 | 1    |
| H(10H) | 5641(13) | 1010(9)  | 425(9)    | 298 | 1    |
| H(10I) | 6597(12) | 1142(10) | 639(8)    | 295 | 1    |
| H(10J) | 6987(4)  | 2327(15) | 777(7)    | 196 | 1    |
| H(11A) | 6802(4)  | 4540(5)  | 1799(4)   | 85  | 1    |
| H(11B) | 6257(4)  | 5016(5)  | 1681(4)   | 85  | 1    |
| H(11C) | 6277(4)  | 4239(6)  | 2436(4)   | 95  | 1    |
| H(11D) | 6793(4)  | 4689(6)  | 2723(4)   | 95  | 1    |
| H(11E) | 6306(5)  | 5002(7)  | 3395(5)   | 122 | 1    |

|        |          |          |         |     |      |
|--------|----------|----------|---------|-----|------|
| H(11F) | 5720(5)  | 4694(7)  | 3136(5) | 122 | 1    |
| H(11G) | 5397(6)  | 5937(8)  | 3046(5) | 127 | 1    |
| H(11H) | 5567(6)  | 5698(8)  | 3642(5) | 127 | 1    |
| H(11I) | 5615(8)  | 7067(9)  | 3765(6) | 166 | 1    |
| H(11J) | 5503(8)  | 7157(9)  | 3143(6) | 166 | 1    |
| H(11K) | 6018(8)  | 8186(10) | 3590(6) | 172 | 1    |
| H(11L) | 6512(8)  | 7626(10) | 3766(6) | 172 | 1    |
| H(12A) | 6864(6)  | 8618(7)  | 3355(6) | 144 | 1    |
| H(12B) | 6429(6)  | 8911(7)  | 2875(6) | 144 | 1    |
| H(12C) | 6903(6)  | 8256(6)  | 2296(6) | 126 | 1    |
| H(12D) | 7273(6)  | 8883(6)  | 2610(6) | 126 | 1    |
| H(12E) | 8139(5)  | 8172(6)  | 2565(6) | 126 | 1    |
| H(12F) | 7728(5)  | 7667(6)  | 2176(6) | 126 | 1    |
| H(12G) | 8539(4)  | 7019(6)  | 2578(5) | 112 | 1    |
| H(12H) | 8345(4)  | 7126(6)  | 3128(5) | 112 | 1    |
| H(12I) | 6932(4)  | 6708(5)  | 2086(4) | 95  | 1    |
| H(12J) | 6390(4)  | 6309(5)  | 2193(4) | 95  | 1    |
| H(12K) | 6072(4)  | 7563(4)  | 1717(4) | 173 | 1    |
| H(12L) | 5607(5)  | 8037(5)  | 920(7)  | 229 | 1    |
| H(13A) | 5605(5)  | 7372(9)  | 138(5)  | 193 | 1    |
| H(13B) | 6067(6)  | 6233(9)  | 153(4)  | 145 | 1    |
| H(13C) | 6532(5)  | 5759(5)  | 950(5)  | 127 | 1    |
| H(13D) | 7201(5)  | 6032(6)  | 2869(4) | 109 | 1    |
| H(13E) | 7539(5)  | 6568(6)  | 3288(4) | 109 | 1    |
| H(13F) | 7196(3)  | 5541(4)  | 3870(3) | 115 | 1    |
| H(13G) | 7478(5)  | 4495(7)  | 4384(4) | 152 | 1    |
| H(13H) | 8233(5)  | 3796(5)  | 4220(4) | 119 | 1    |
| H(13I) | 8707(3)  | 4144(5)  | 3540(4) | 103 | 1    |
| H(13J) | 8425(4)  | 5191(6)  | 3025(3) | 103 | 1    |
| H(14A) | 3864(10) | 7949(16) | 603(14) | 311 | 0.75 |
| H(14B) | 4513(10) | 7890(16) | 728(14) | 311 | 0.75 |
| H(14C) | 4224(10) | 8676(16) | 720(14) | 311 | 0.75 |
| H(14D) | 3836(11) | 8337(19) | 1442(9) | 216 | 0.75 |
| H(14E) | 4133(11) | 7557(19) | 1453(9) | 216 | 0.75 |
| H(14F) | 5252(10) | 9112(12) | 2294(9) | 243 | 0.75 |
| H(14G) | 5559(10) | 8414(12) | 2578(9) | 243 | 0.75 |
| H(14H) | 5053(10) | 8768(12) | 2796(9) | 243 | 0.75 |



**Table 1. Crystal data and structure refinement for 1.**

|                                   |   |
|-----------------------------------|---|
| Identification code               | AGMB22  |
| Empirical formula                 | C <sub>26</sub> H <sub>32</sub> N <sub>6</sub> O <sub>4</sub> Cu . 2BF <sub>4</sub>           |
| Formula weight                    | 729.74  |
| Temperature                       | 293(2) K  |
| Diffractometer Used               | Siemens P4/PC   |
| Wavelength                        | 1.54178 Å   |
| Crystal system                    | Monoclinic  |
| Space group                       | P2 <sub>1</sub>   |
| Unit cell dimensions              | a = 8.082(3) Å alpha = 90°<br>b = 9.797(3) Å beta = 96.84(4)°<br>c = 20.206(11) Å gamma = 90° |
| Volume, Z                         | 1588.6(12) Å <sup>3</sup> , 2   |
| Density (calculated)              | 1.526 Mg/m <sup>3</sup>   |
| Absorption coefficient            | 1.781 mm <sup>-1</sup>  |
| F(000)                            | 746   |
| Crystal colour/morphology         | Deep blue plates  |
| Crystal size                      | 0.40 x 0.37 x 0.20 mm   |
| θ range for data collection       | 2.20 to 62.54°  |
| Limiting indices                  | -8 ≤ h ≤ 9, -11 ≤ k ≤ 9,<br>-23 ≤ l ≤ 23  |
| Scan type                         | ω-scans   |
| Reflections collected             | 2893  |
| Independent reflections           | 2801 (R <sub>int</sub> = 0.0786)  |
| Observed reflections [F>4σ(F)]    | 2717  |
| Absorption correction             | Face-indexed numerical  |
| Max. and min. transmission        | 0.7116 and 0.5191   |
| Structure solution method         | Direct  |
| Refinement method                 | Full-matrix least-squares on F <sup>2</sup>   |
| Data / restraints / parameters    | 2788 / 1 / 425  |
| Goodness-of-fit on F <sup>2</sup> | 1.060   |
| Final R indices [F>4σ(F)]         | R1 = 0.0549, wR2 = 0.1497   |
| R indices (all data)              | R1 = 0.0565, wR2 = 0.1888   |
| Absolute structure parameter      | 0.04(6)   |
| Extinction coefficient            | 0.0033(6)   |
| Largest diff. peak and hole       | 0.575 and -0.571 eÅ <sup>-3</sup>   |
| Mean and maximum shift/error      | 0.000 and 0.000   |

**Table 2.** Atomic coordinates [ $\times 10^4$ ], equivalent isotropic displacement parameters [ $\text{\AA}^2 \times 10^3$ ] and site occupancy factors for 1. U(eq) is defined as one third of the trace of the orthogonalized  $U_{ij}$  tensor.

|       | x         | y        | z       | U(eq)   | sof |
|-------|-----------|----------|---------|---------|-----|
| Cu    | 2829(1)   | 4596(1)  | 2157(1) | 42(1)   | 1   |
| N(1)  | 3762(6)   | 2630(6)  | 2178(2) | 46(1)   | 1   |
| C(2)  | 5411(8)   | 2596(8)  | 2595(4) | 52(2)   | 1   |
| C(3)  | 6175(11)  | 1203(9)  | 2762(4) | 71(2)   | 1   |
| O(4)  | 5315(9)   | 451(7)   | 3213(3) | 87(2)   | 1   |
| C(5)  | 6167(17)  | 352(13)  | 3872(5) | 104(4)  | 1   |
| C(6)  | 5836(23)  | 1430(14) | 4316(5) | 124(5)  | 1   |
| O(7)  | 6203(16)  | 2697(11) | 4127(4) | 138(4)  | 1   |
| C(8)  | 5840(18)  | 3748(17) | 4552(5) | 112(4)  | 1   |
| C(9)  | 6440(14)  | 5036(15) | 4278(6) | 104(4)  | 1   |
| O(10) | 5428(8)   | 5374(8)  | 3694(3) | 90(2)   | 1   |
| C(11) | 5935(25)  | 6543(15) | 3389(7) | 153(7)  | 1   |
| C(12) | 5883(31)  | 6784(17) | 2792(7) | 192(11) | 1   |
| O(13) | 5230(7)   | 5905(6)  | 2288(3) | 67(1)   | 1   |
| C(14) | 5708(19)  | 6102(21) | 1666(5) | 178(10) | 1   |
| C(15) | 5003(16)  | 5434(14) | 1168(6) | 118(5)  | 1   |
| N(16) | 3464(6)   | 4631(8)  | 1207(2) | 52(1)   | 1   |
| C(17) | 3696(9)   | 3225(8)  | 1028(3) | 55(2)   | 1   |
| C(18) | 3818(8)   | 2262(8)  | 1495(3) | 54(2)   | 1   |
| C(19) | 2430(8)   | 1848(7)  | 2469(4) | 54(2)   | 1   |
| C(20) | 1907(8)   | 2644(7)  | 3042(3) | 47(1)   | 1   |
| C(21) | 1324(10)  | 2018(9)  | 3573(4) | 66(2)   | 1   |
| C(22) | 888(11)   | 2809(10) | 4091(4) | 74(2)   | 1   |
| C(23) | 1015(10)  | 4213(8)  | 4055(3) | 62(2)   | 1   |
| C(24) | 1590(8)   | 4783(9)  | 3496(3) | 53(2)   | 1   |
| N(25) | 2012(6)   | 4018(6)  | 2994(3) | 44(1)   | 1   |
| C(26) | 1963(12)  | 5241(9)  | 788(3)  | 71(2)   | 1   |
| C(27) | 1281(10)  | 6377(8)  | 1180(3) | 59(2)   | 1   |
| C(28) | 501(15)   | 7478(10) | 871(4)  | 84(3)   | 1   |
| C(29) | -191(13)  | 8443(9)  | 1243(4) | 76(2)   | 1   |
| C(30) | -3(10)    | 8309(8)  | 1919(4) | 64(2)   | 1   |
| C(31) | 826(9)    | 7209(8)  | 2201(3) | 60(2)   | 1   |
| N(32) | 1475(7)   | 6223(6)  | 1842(2) | 49(1)   | 1   |
| C(33) | 3729(10)  | 2923(10) | 337(4)  | 69(2)   | 1   |
| N(34) | 3670(12)  | 2727(12) | -225(3) | 101(3)  | 1   |
| C(35) | 3955(11)  | 839(10)  | 1331(4) | 72(2)   | 1   |
| N(36) | 3993(13)  | -298(14) | 1226(5) | 110(3)  | 1   |
| B(1)  | -1272(10) | 2521(12) | 1111(4) | 66(2)   | 1   |
| F(11) | -40(8)    | 1893(9)  | 834(4)  | 110(2)  | 1   |
| F(12) | -611(18)  | 3403(12) | 1570(5) | 196(5)  | 1   |
| F(13) | -2268(13) | 3199(18) | 688(5)  | 232(7)  | 1   |
| F(14) | -1959(18) | 1657(17) | 1480(8) | 257(8)  | 1   |
| B(2)  | 456(12)   | 8416(9)  | 4023(4) | 61(2)   | 1   |
| F(21) | 389(7)    | 9470(7)  | 4441(2) | 85(1)   | 1   |
| F(22) | 2019(7)   | 8283(9)  | 3817(3) | 119(2)  | 1   |
| F(23) | -597(8)   | 8635(10) | 3442(3) | 123(3)  | 1   |
| F(24) | 29(15)    | 7259(7)  | 4316(5) | 156(4)  | 1   |