**SUPPORTING INFORMATION**

# $A_3$ and $A_2B$-nitrocorroles: synthesis and antiviral activity evaluation against Human Cytomegalovirus Infection

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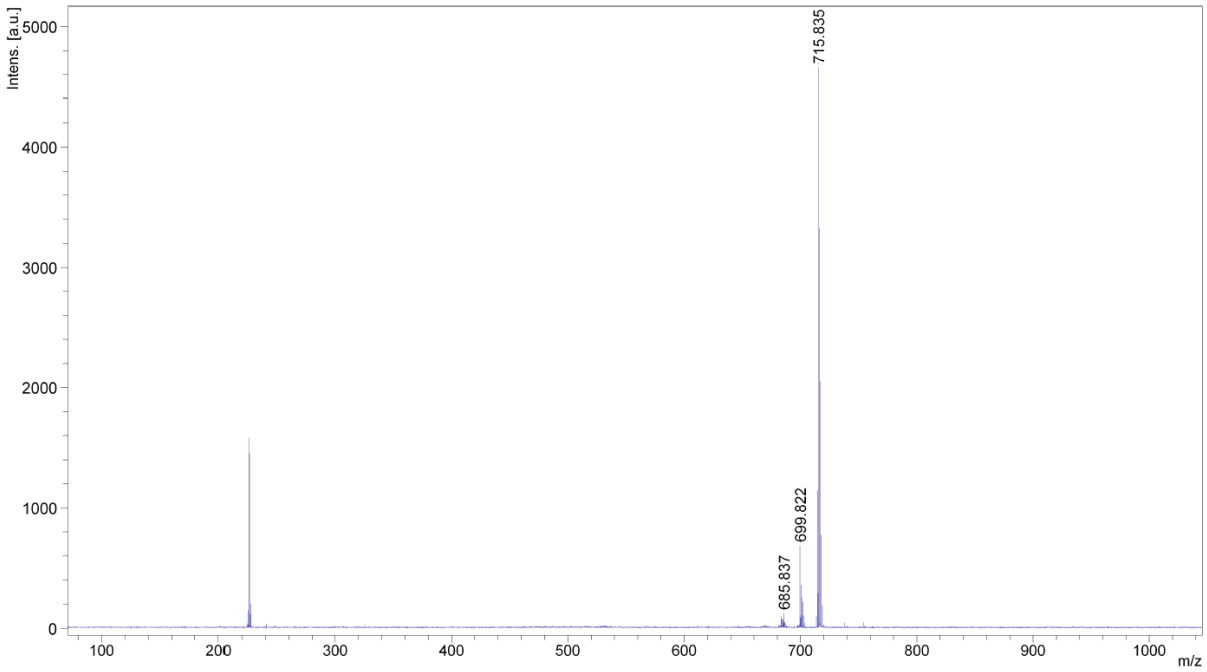
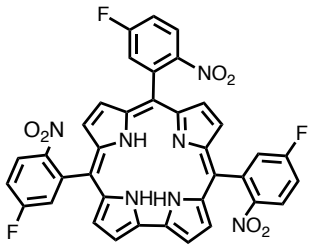
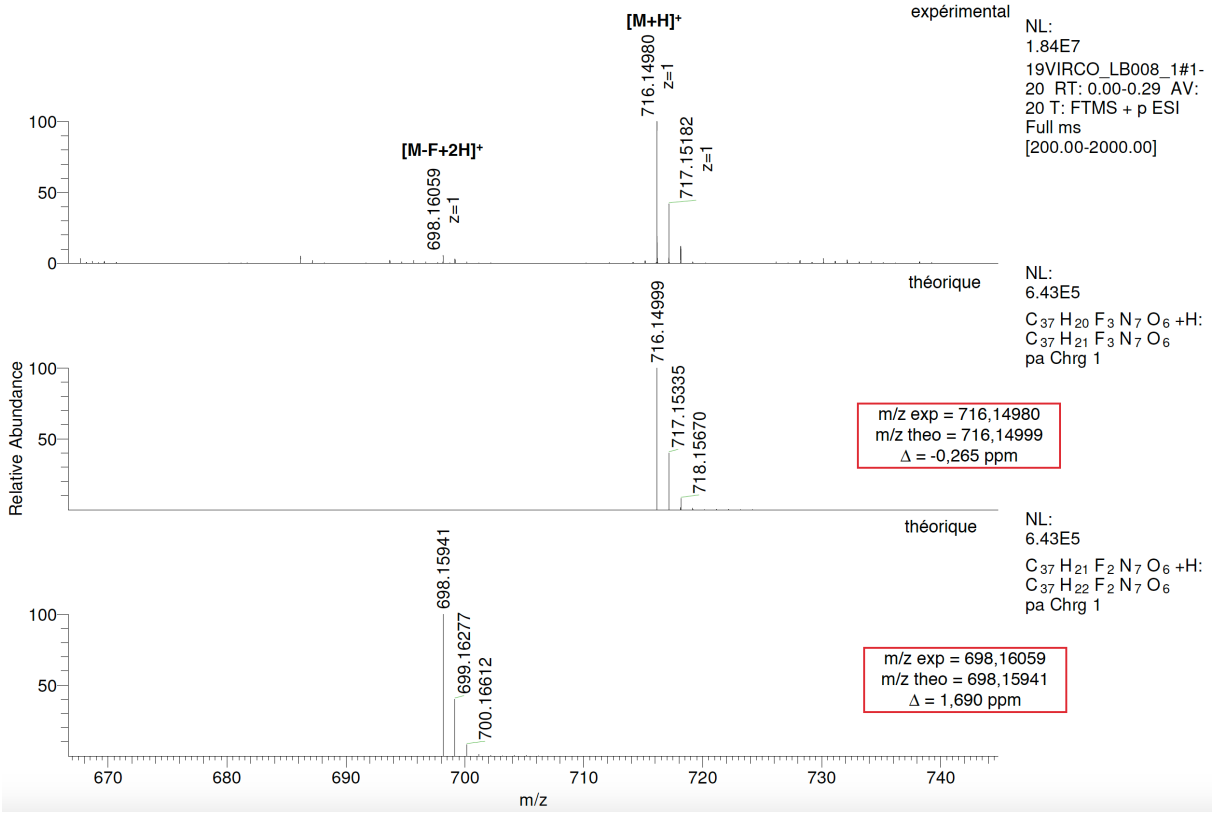
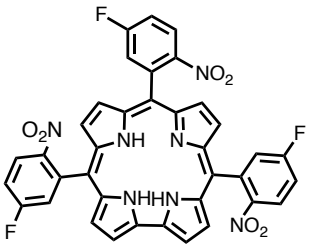



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S1:** MALDI/TOF LRMS of 5,10,15-tris(5'-fluoro-2'-nitrophenyl)corrole **1.**




Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$

Exact Mass: 716.14980

Experimental: 716.14999

δ (ppm) = 0.26

**Figure S2:** ESI HRMS of 5,10,15-tris(5'-fluoro-2'-nitrophenyl)corrole **1.**

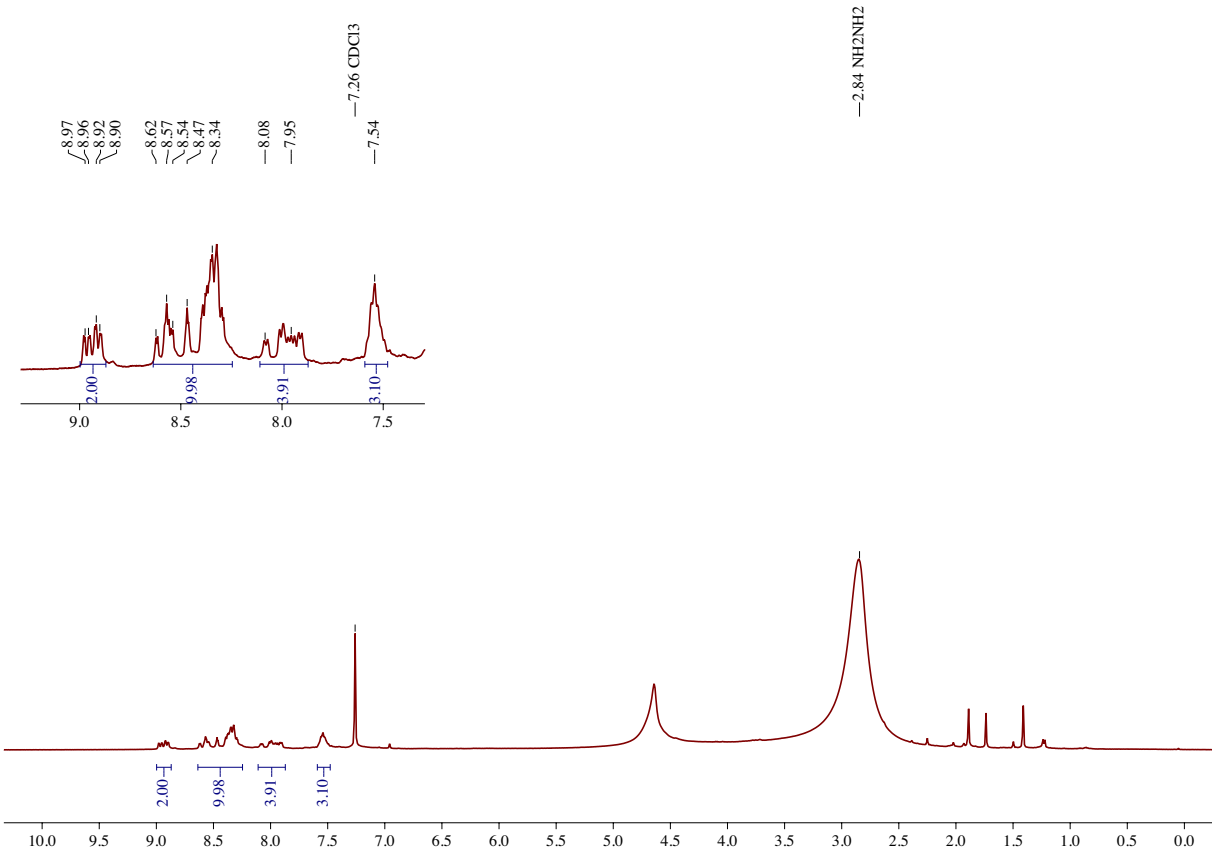



**Figure S3:** $^{1}$H NMR spectrum (500 MHz, $CDCl_3$ + one drop of hydrazine 64%) of 5,10,15-tris(5'-fluoro-2'-nitrophenyl)corrole **1.**

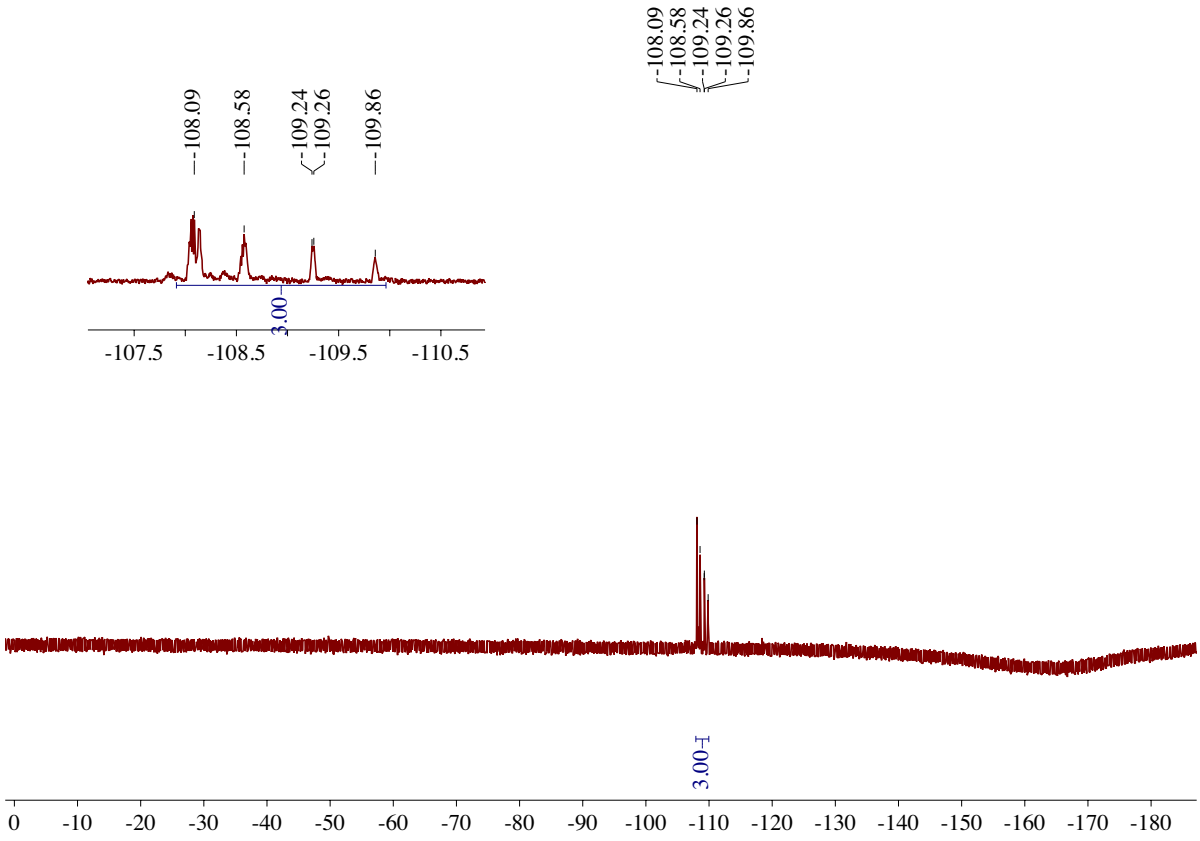


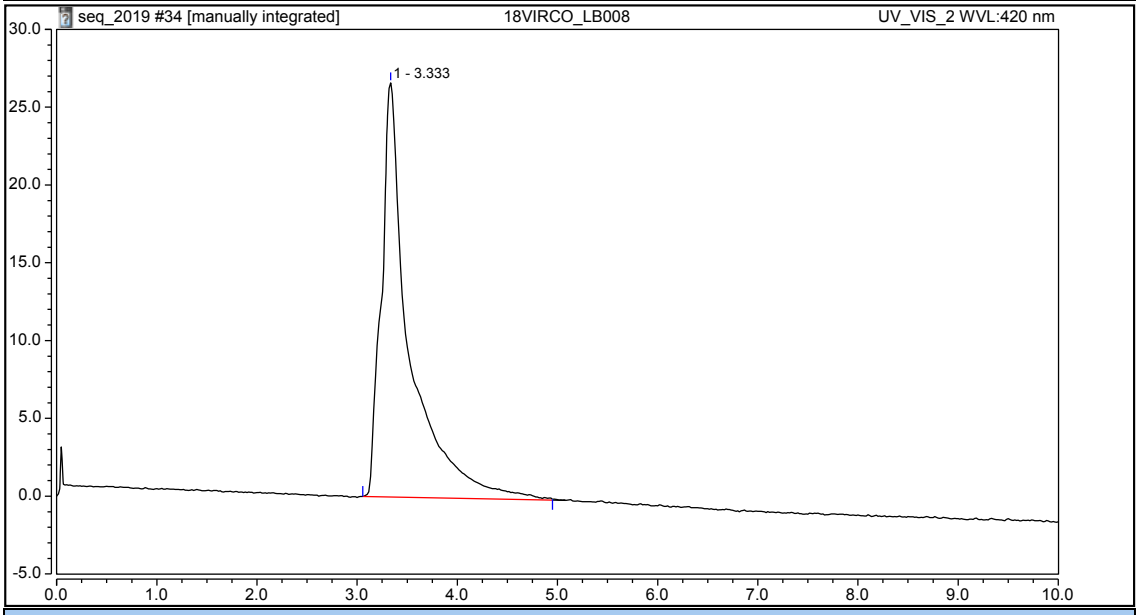

**Figure S4:** $^{19}$F NMR (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(5'-fluoro-2'-nitrophenyl)corrole **1.**

Chromatogram and Results

**Injection Details**

| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB008** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **RB8** | *Injection Volume:* | **5.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **Standard_CHCl3_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **24/mai/19 15:49** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.333 | 8.657 | 26.627 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **8.657** | **26.627** | **100.00** | **100.00** | |

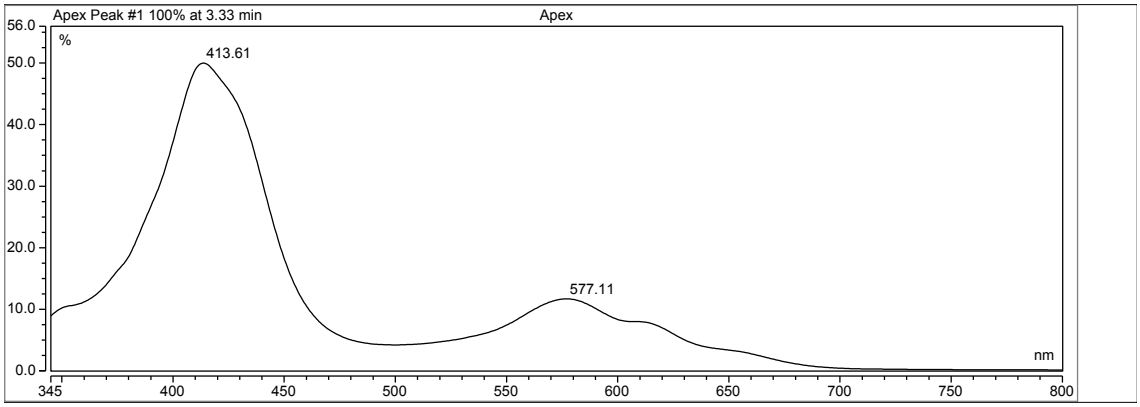
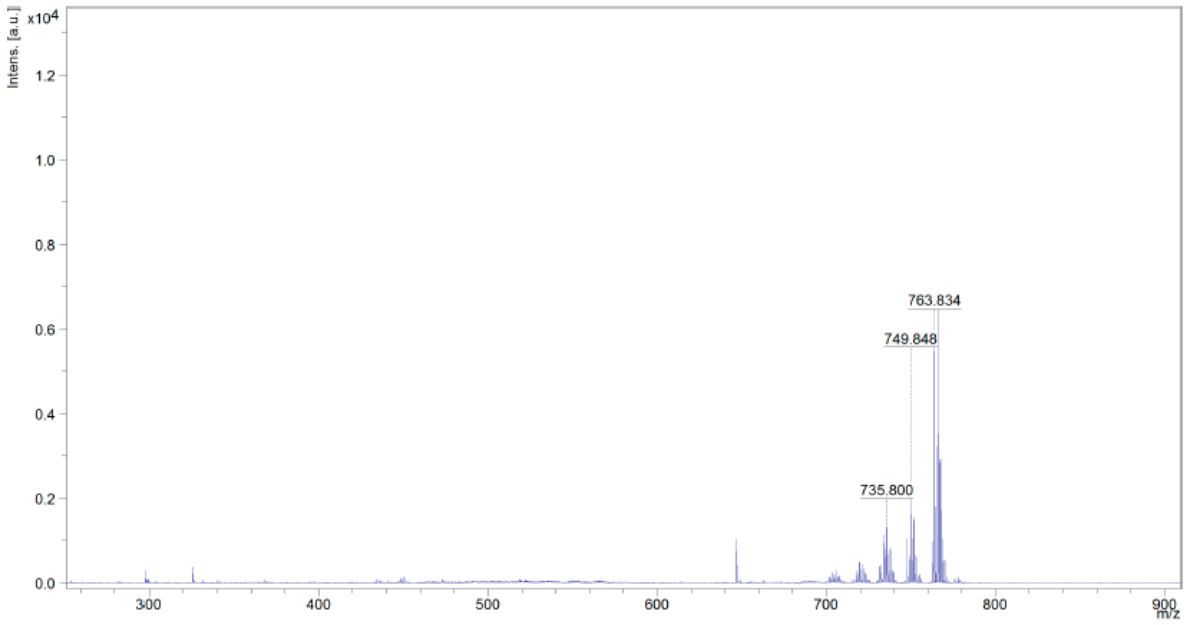
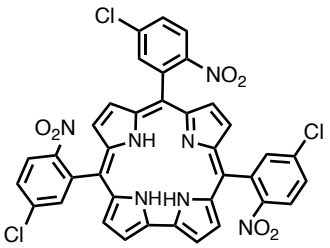


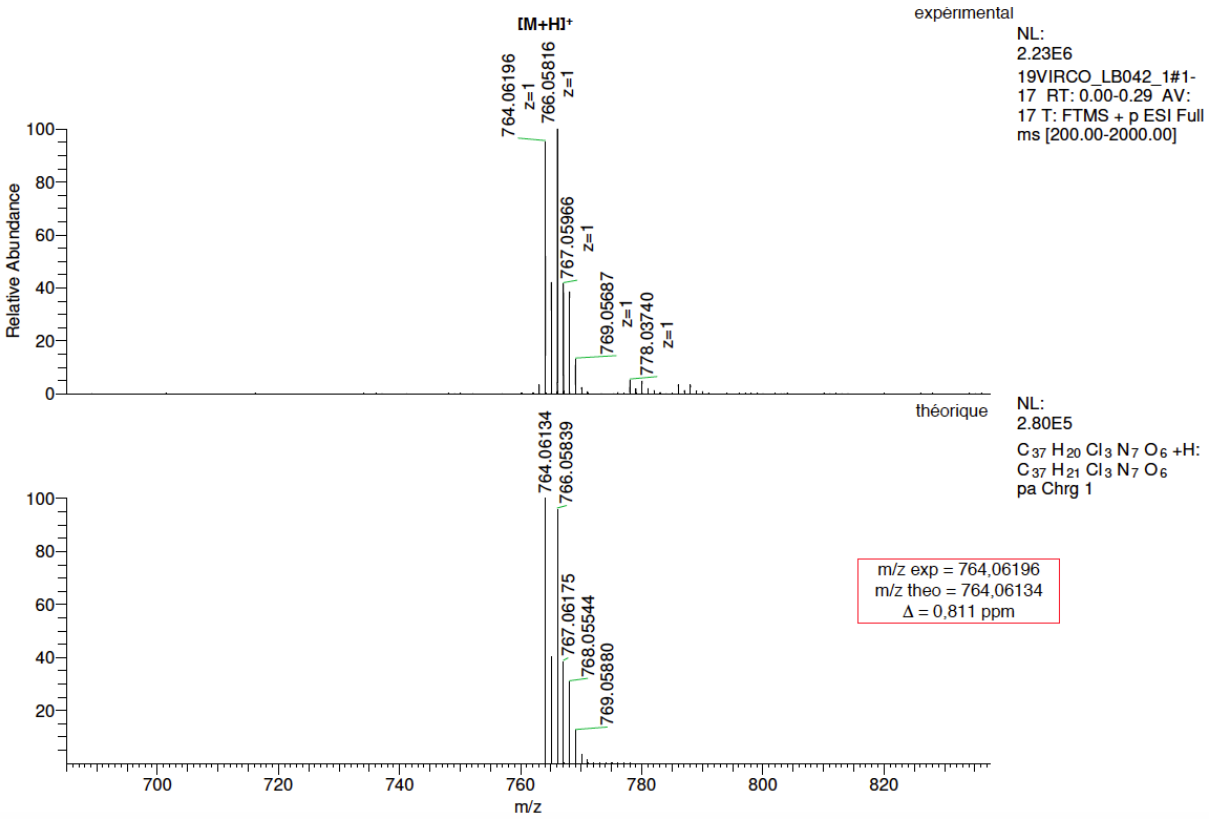

**Figure S5:** HPLC chromatogram of 5,10,15-tris(5'-fluoro-2'-nitrophenyl)corrole **1.**

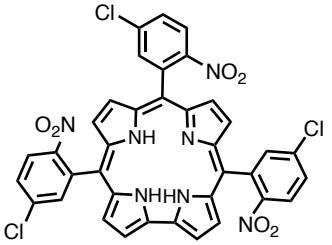



Chemical Formula: $C_{37}H_{20}Cl_3N_7O_6$
Exact Mass: 763.0541
Molecular Weight: 764.9600

**Figure S6:** MALDI/TOF LRMS of 5,10,15-tris(5'-chloro-2'-nitrophenyl)corrole **2.**




Chemical Formula $[M+H]^+$: $C_{37}H_{21}Cl_3N_7O_6$

Exact Mass: 764.06134

Experimental: 764.06196

δ (ppm) = 0.81

**Figure S7:** ESI HRMS of 5,10,15-tris(5'-chloro-2'-nitrophenyl)corrole **2.**

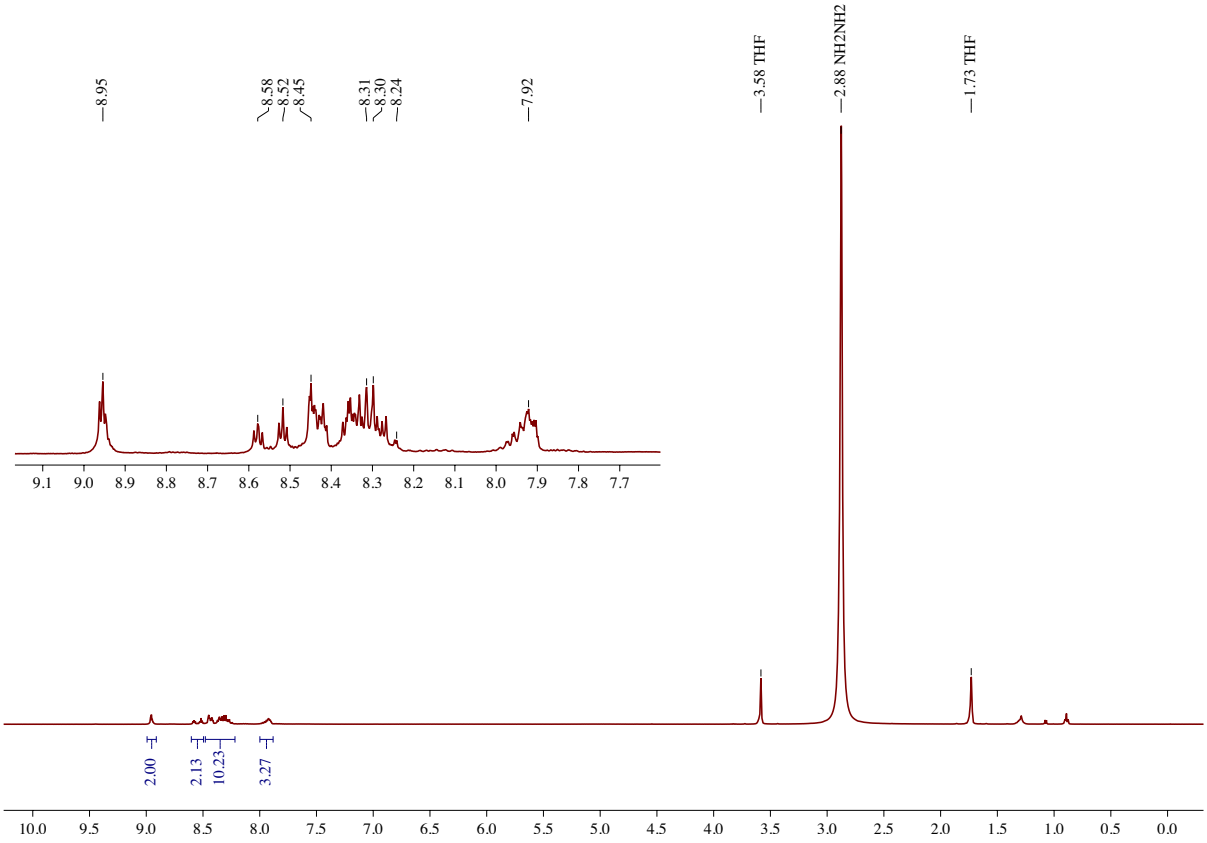


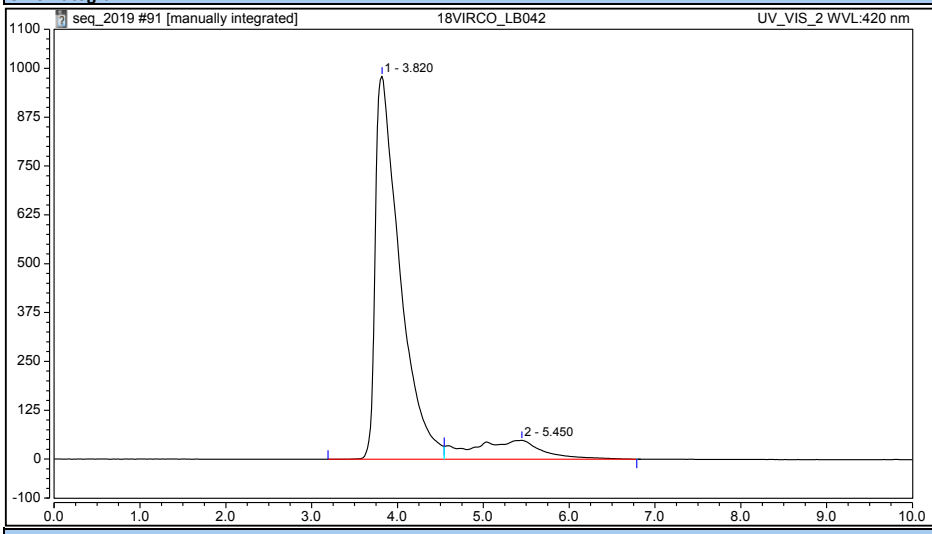

**Figure S8:** $^{1}$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(5'-chloro-2'-nitrophenyl)corrole **2.**

Chromatogram and Results

**Injection Details**

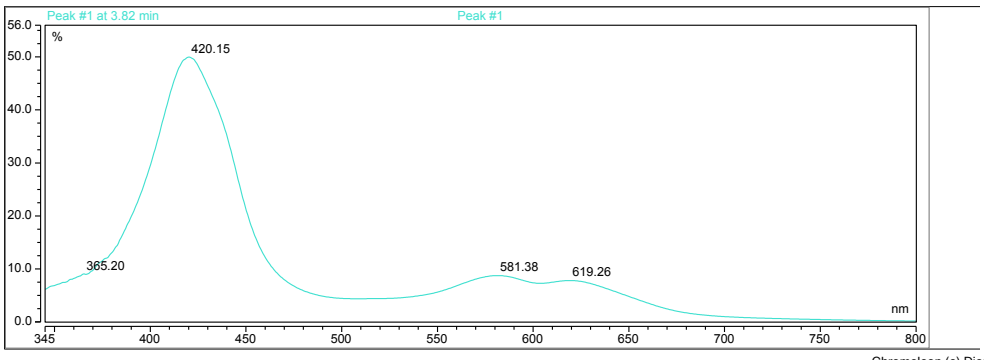
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB042** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BB1** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 20:05** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.820 | 323.752 | 980.291 | 87.30 | 95.32 | n.a. |
| 2 | | 5.450 | 47.077 | 48.128 | 12.70 | 4.68 | n.a. |
| **Total:** | | | **370.829** | **1028.419** | **100.00** | **100.00** | |



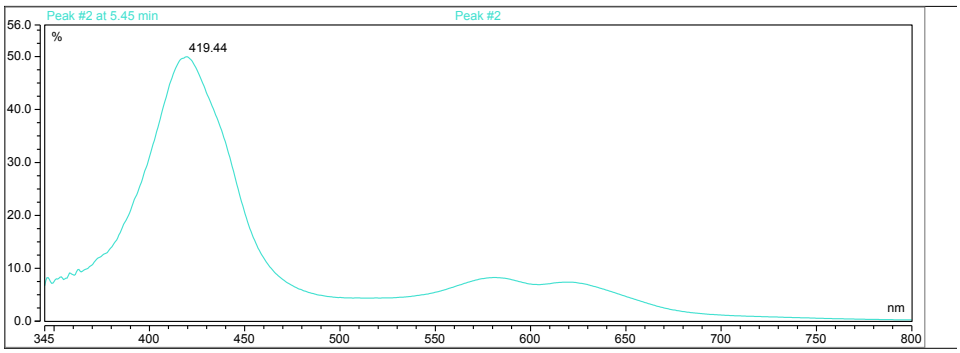
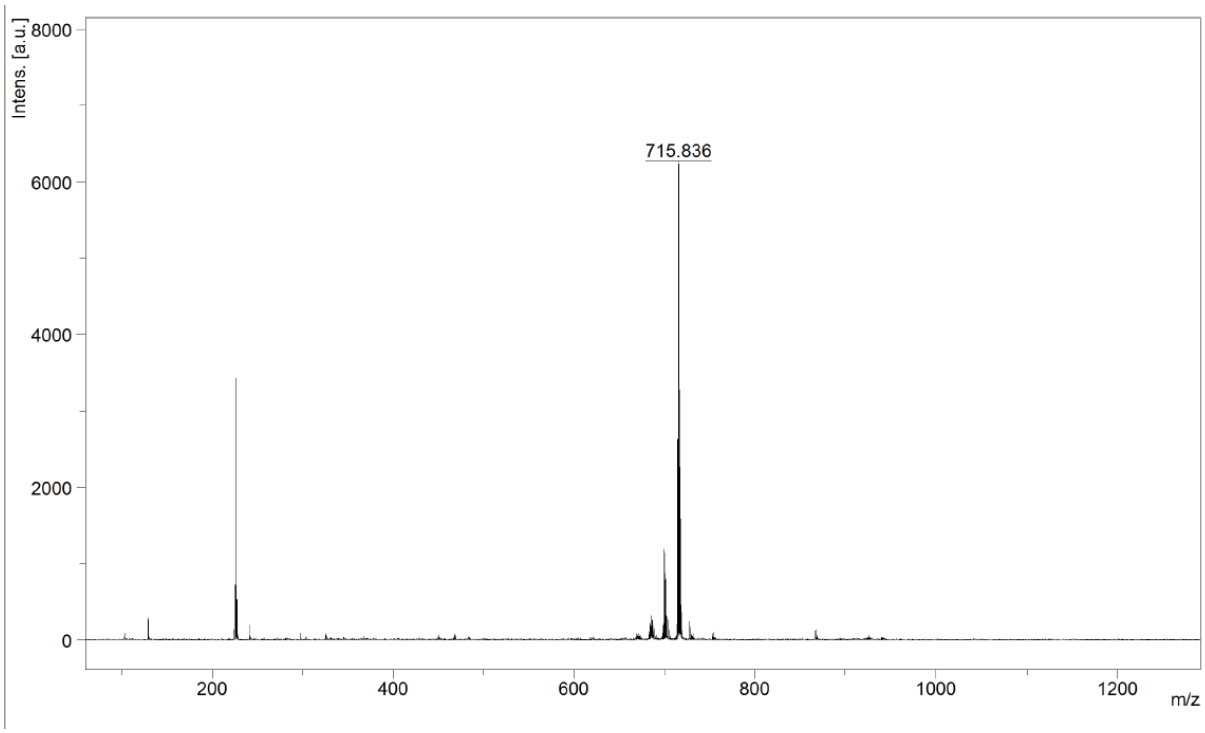
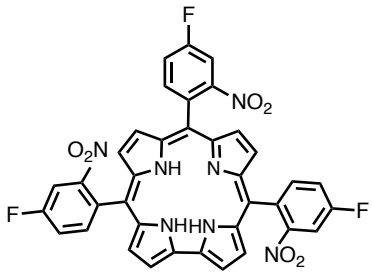



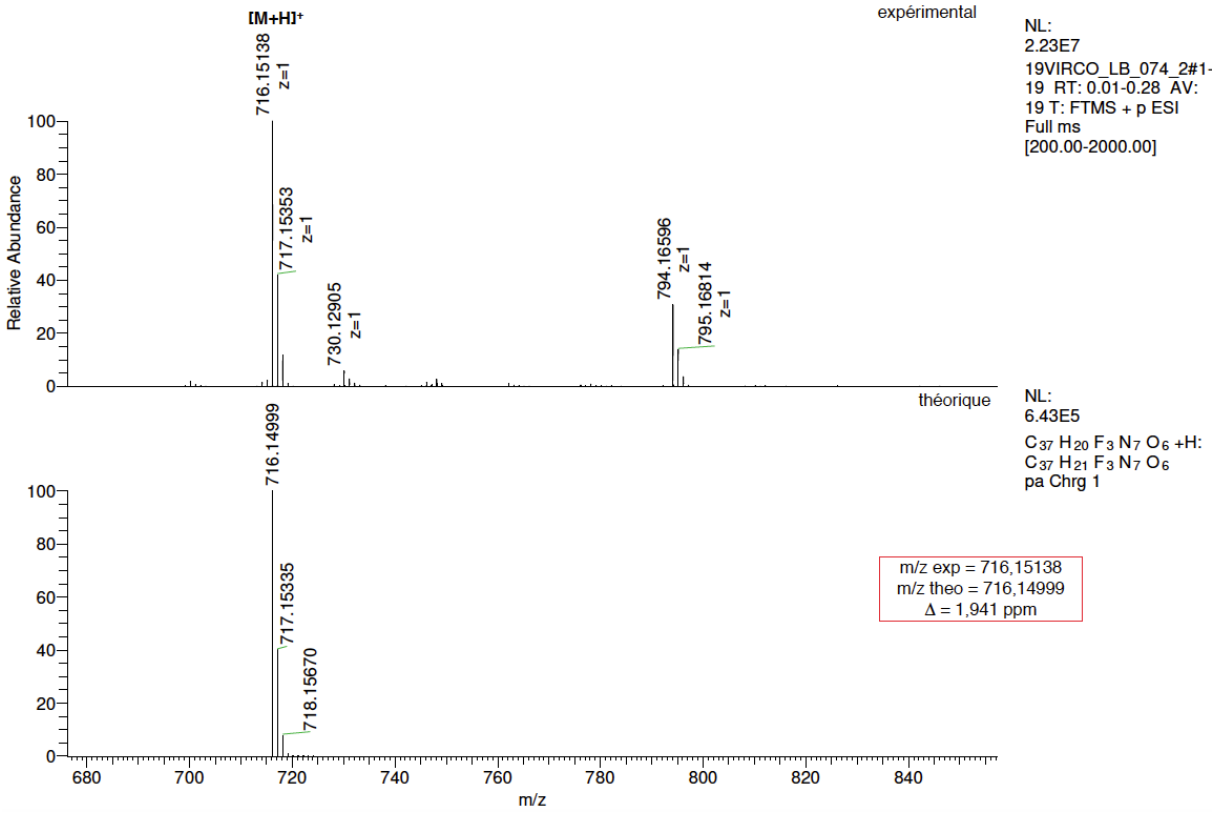

**Figure S9:** HPLC chromatogram of 5,10,15-tris(5'-chloro-2'-nitrophenyl)corrole **2.**

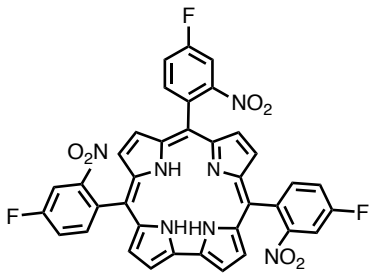



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S10:** MALDI/TOF LRMS of 5,10,15-tris(4'-fluoro-2'-nitrophenyl)corrole **3.**




Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$
Exact Mass: 716.14999
Experimental: 716.15138
δ (ppm) = 1.941

**Figure S11:** ESI HRMS of 5,10,15-tris(4'-fluoro-2'-nitrophenyl)corrole **3.**

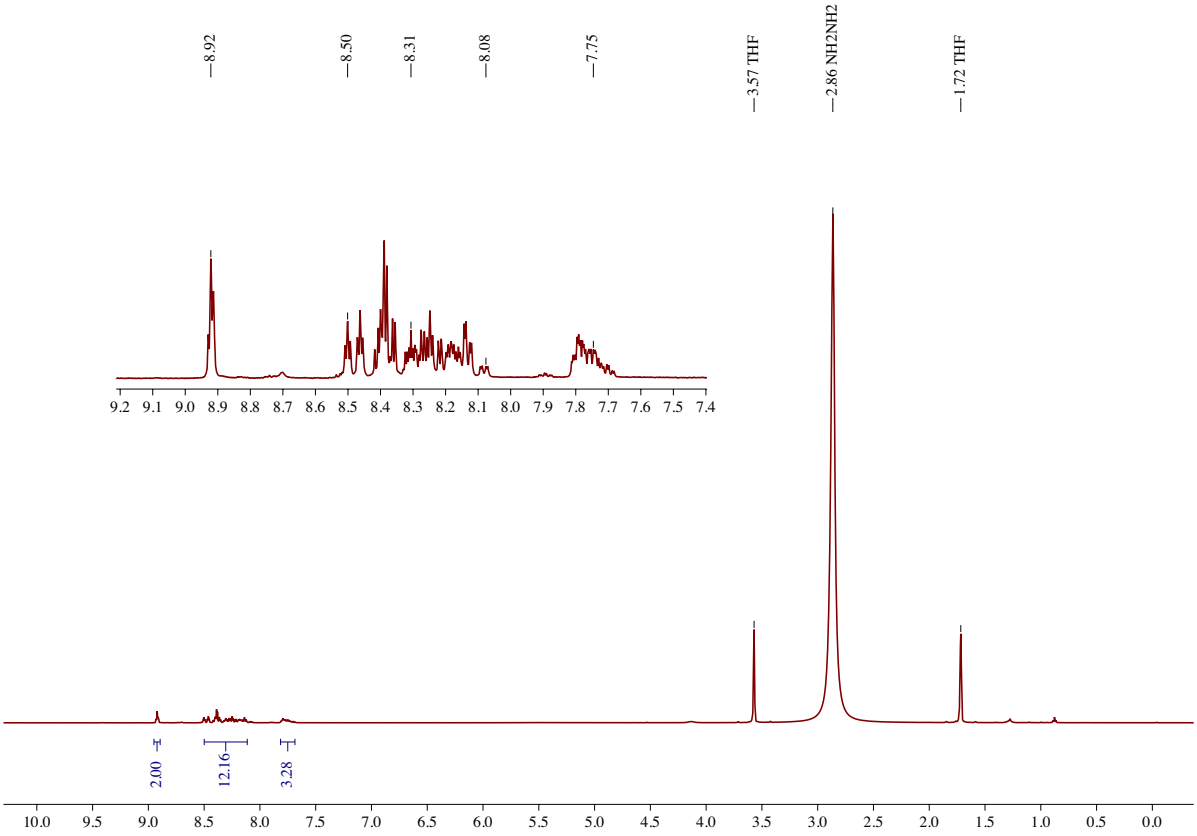



**Figure S12:** $^{1}$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-fluoro-2'-nitrophenyl)corrole **3.**

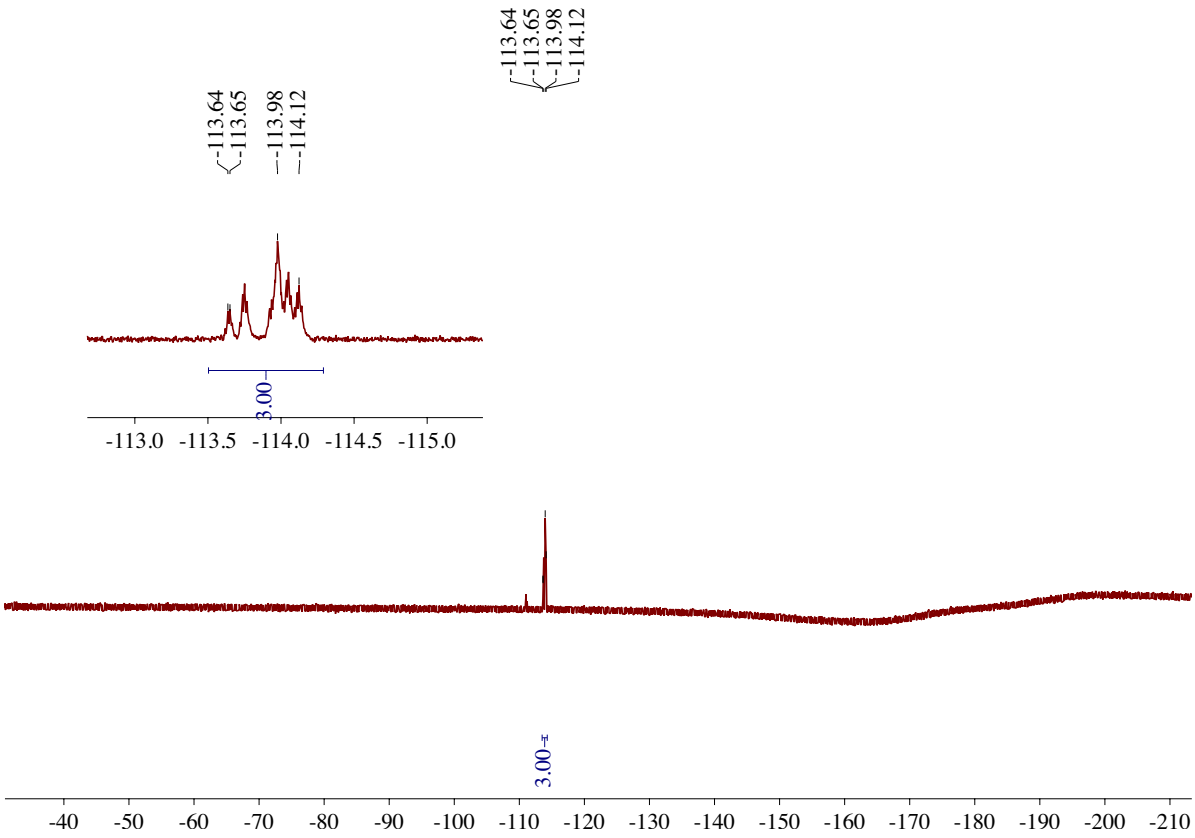


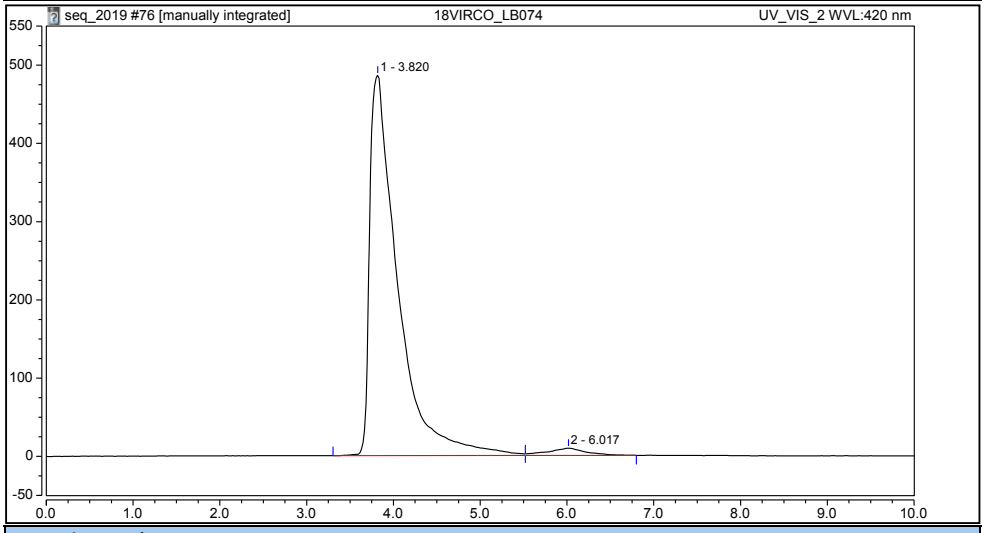

**Figure S13:** $^{19}$F NMR (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-fluoro-2'-nitrophenyl)corrole **3.**

Chromatogram and Results

**Injection Details**

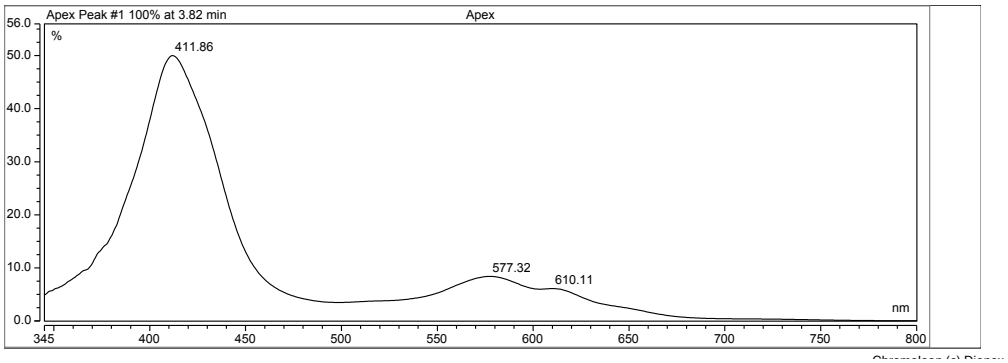
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB074** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **RD2** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 16:34** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.820 | 181.264 | 486.071 | 97.46 | 98.13 | n.a. |
| 2 | | 6.017 | 4.733 | 9.286 | 2.54 | 1.87 | n.a. |
| **Total:** | | | **185.997** | **495.357** | **100.00** | **100.00** | |



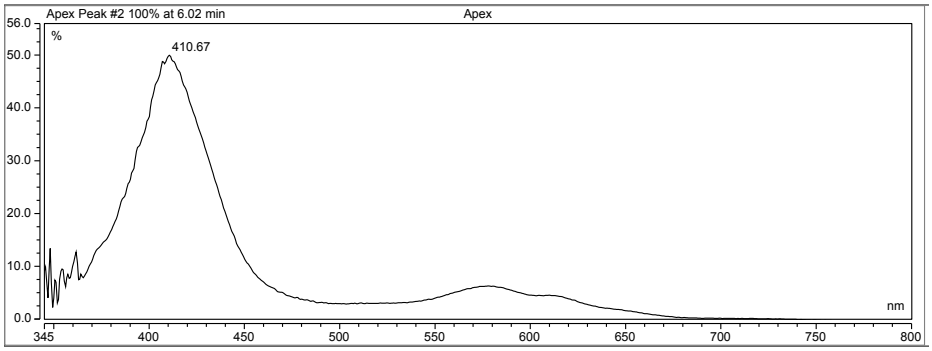
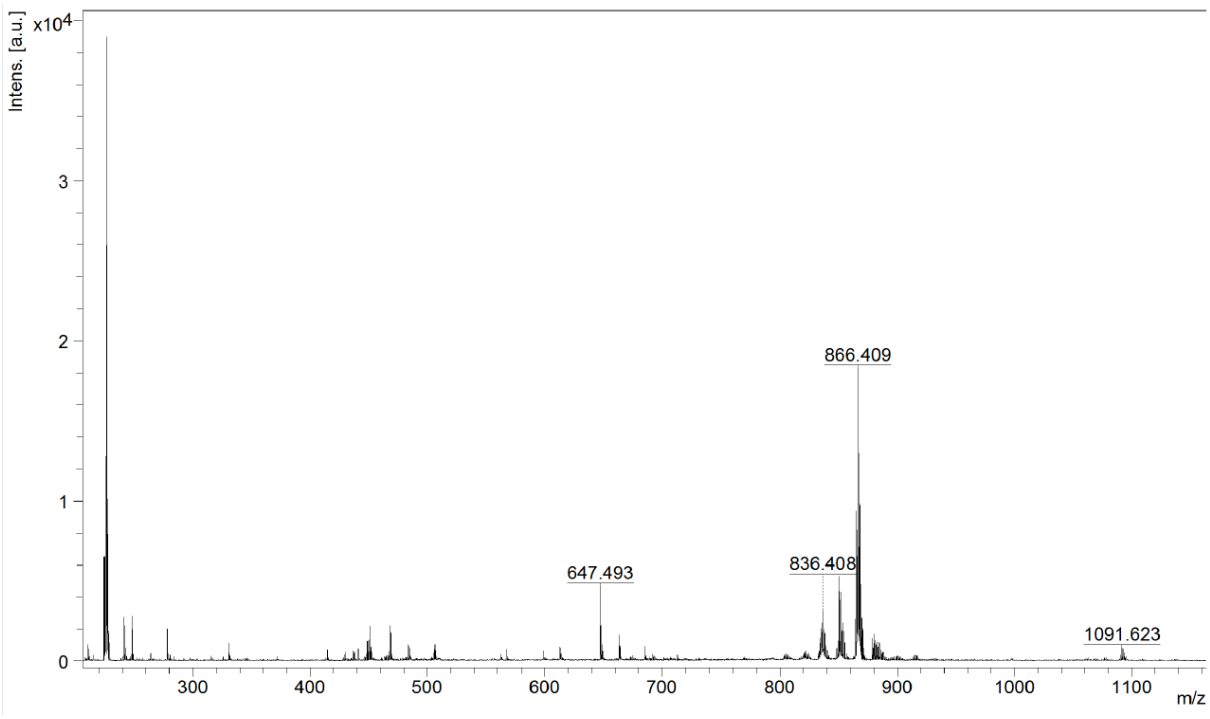
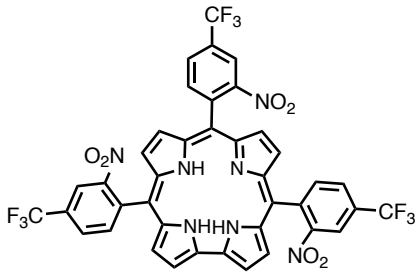



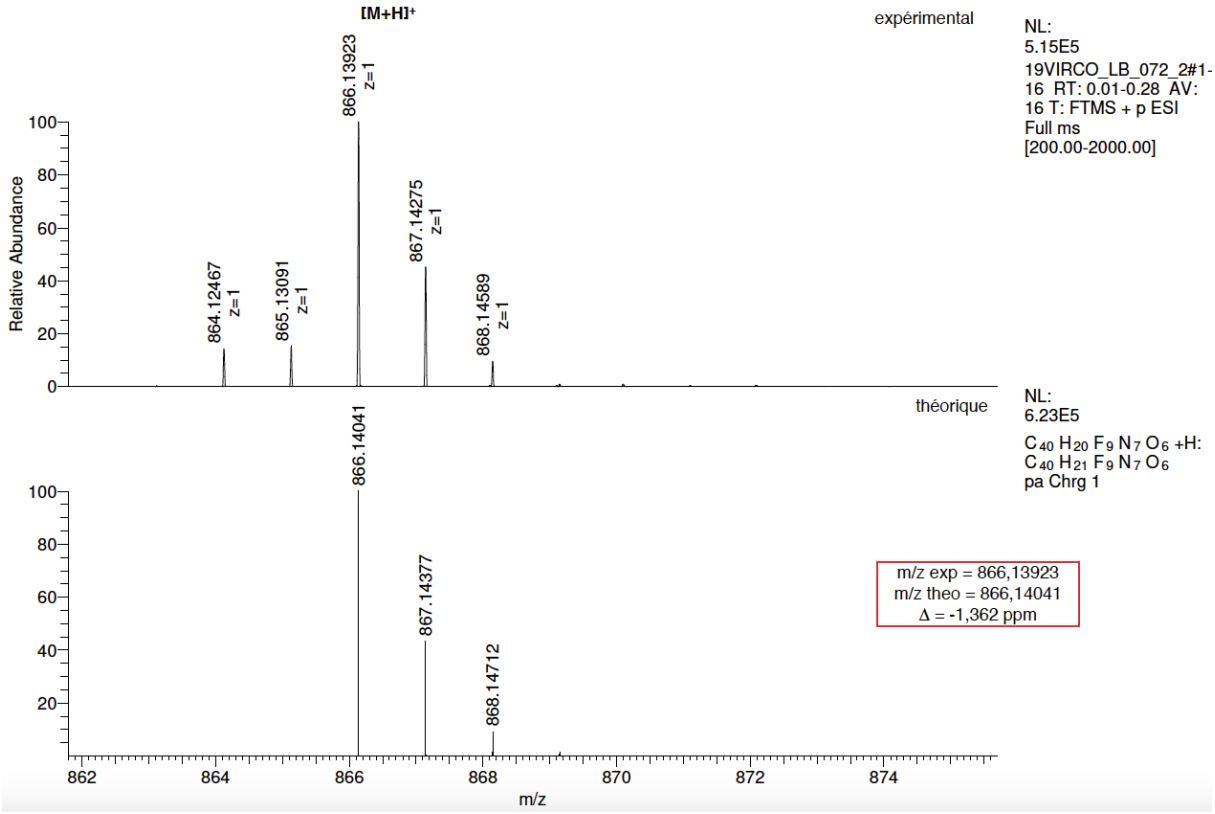

**Figure S14:** HPLC chromatogram of 5,10,15-tris(4'-fluoro-2'-nitrophenyl)corrole **3.**

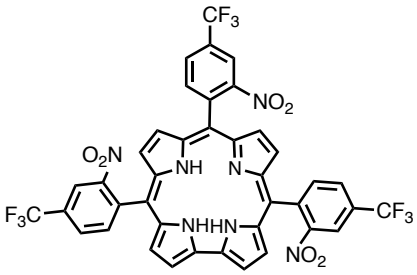



Chemical Formula: $C_{40}H_{20}F_9N_7O_6$
Exact Mass: 865.1331
Molecular Weight: 865.6286

**Figure S15:** MALDI/TOF LRMS of 5,10,15-tris(2'-nitro-4'-trifluoromethyl)corrole **4.**




Chemical Formula $[M+H]^+$: $C_{40}H_{21}F_9N_7O_6$

Exact Mass: 866.14041

Experimental: 866.13923

δ (ppm) = 1.362

**Figure S16:** ESI HRMS of 5,10,15-tris(2'-nitro-4'-trifluoromethyl)corrole **4.**

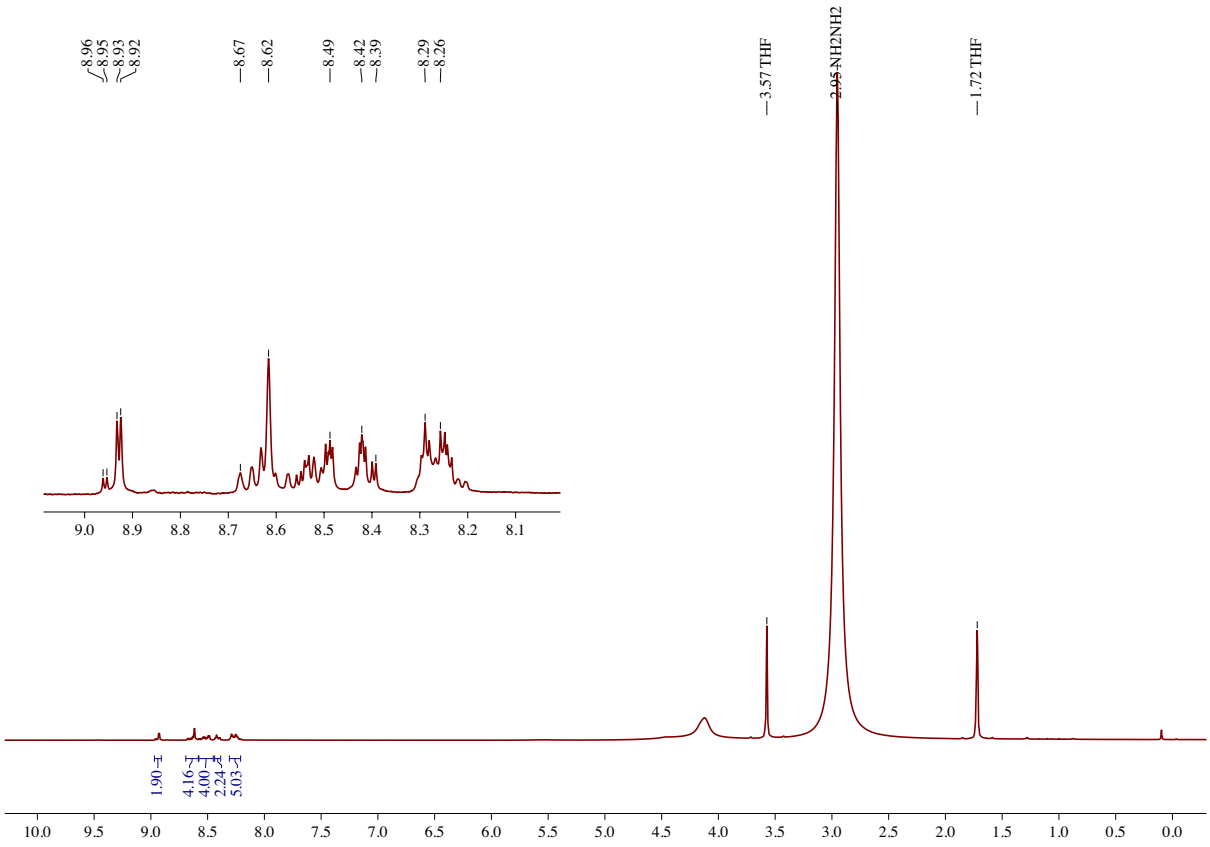



**Figure S17:** $^{1}$H NMR (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-nitro-4'-trifluoromethyl)corrole **4.**

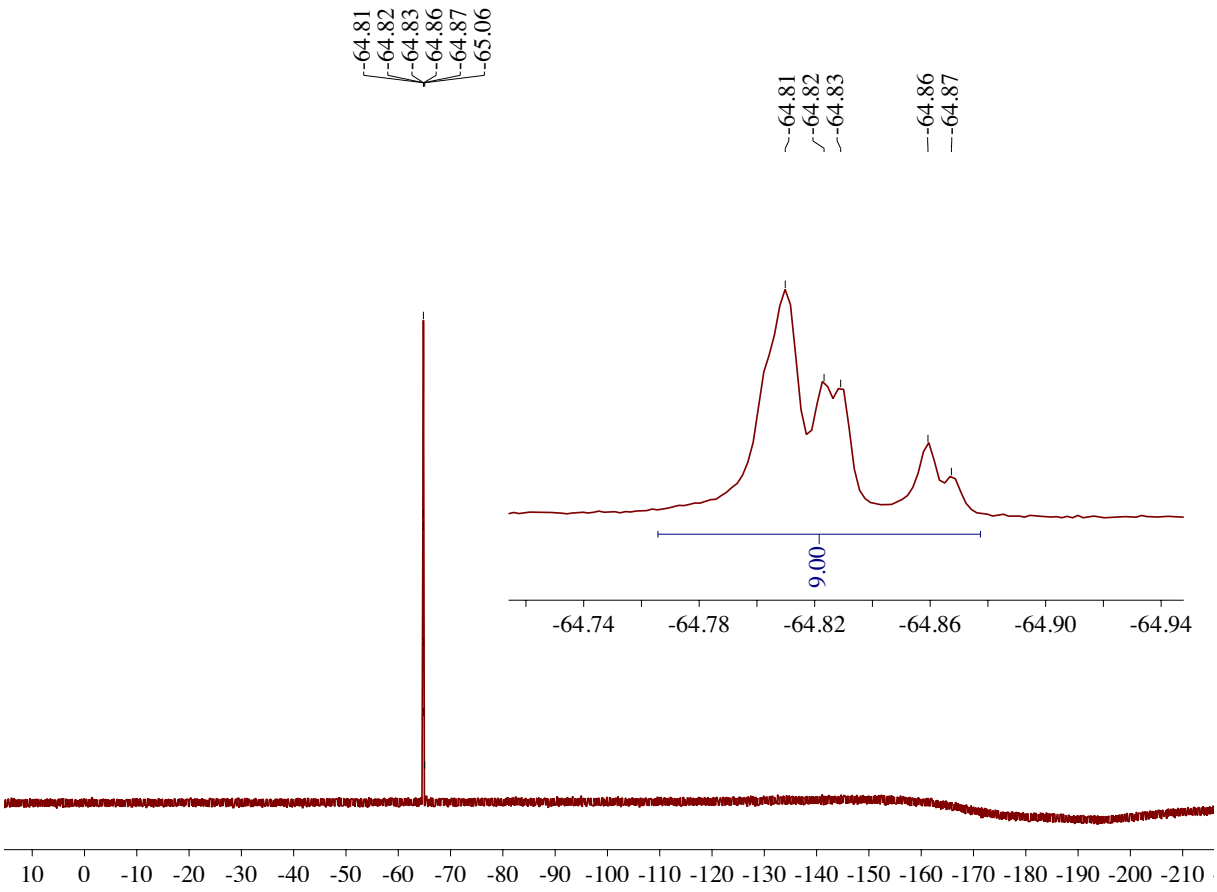


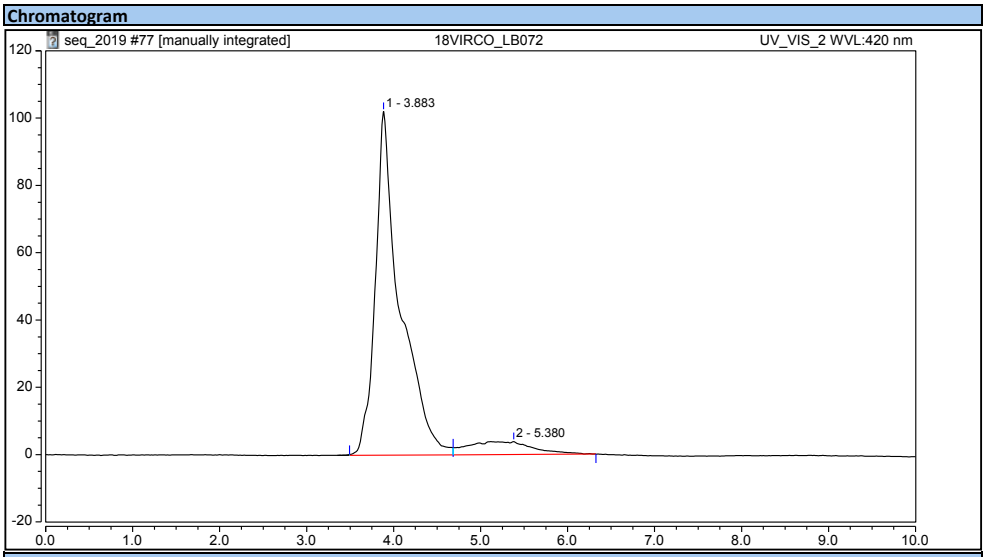

**Figure S18:** $^{19}$F NMR (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-nitro-4'-trifluoromethyl)corrole **4.**

Chromatogram and Results

**Injection Details**

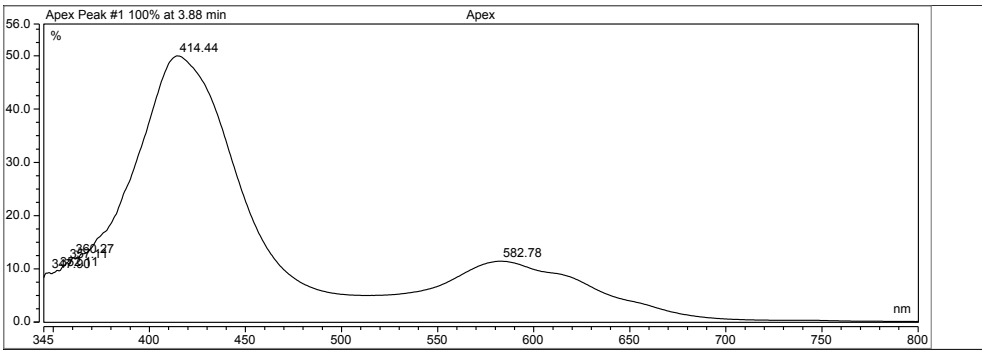
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB072** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **RD3** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 17:11** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.883 | 33.715 | 102.167 | 91.00 | 96.37 | n.a. |
| 2 | | 5.380 | 3.336 | 3.853 | 9.00 | 3.63 | n.a. |
| **Total:** | | | **37.051** | **106.020** | **100.00** | **100.00** | |



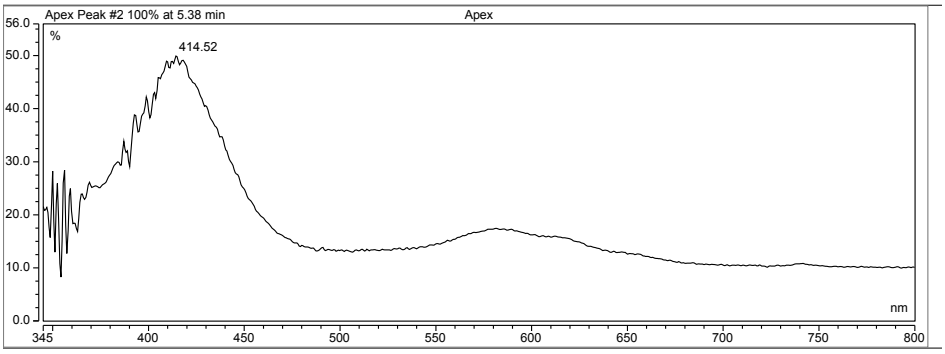
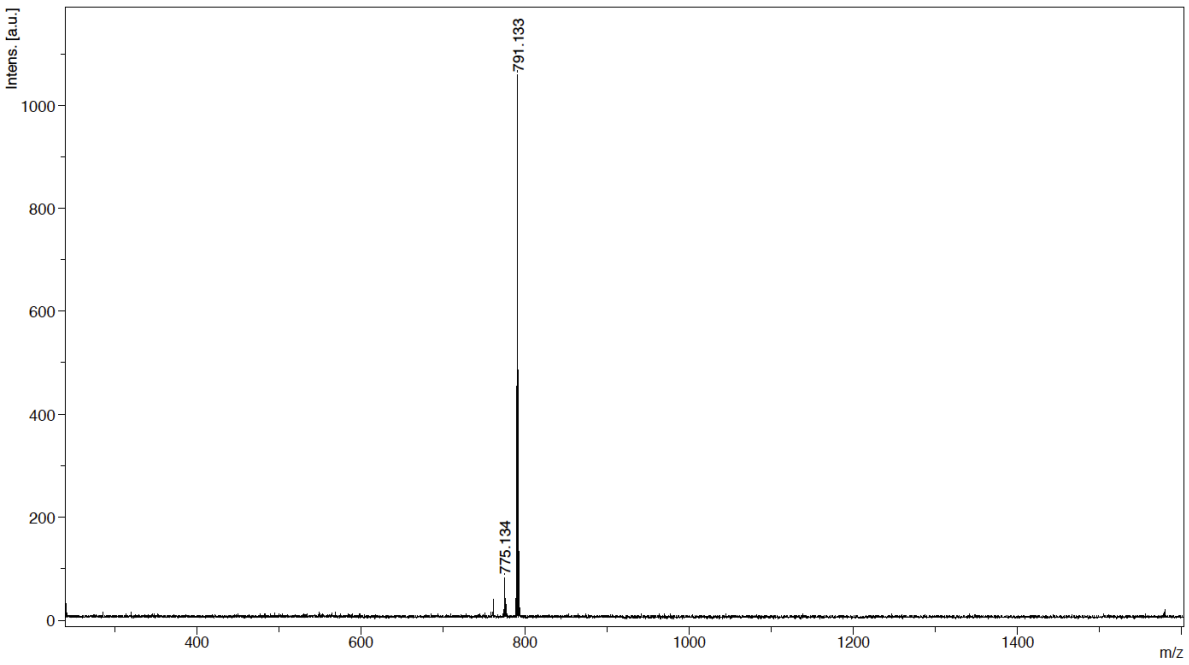
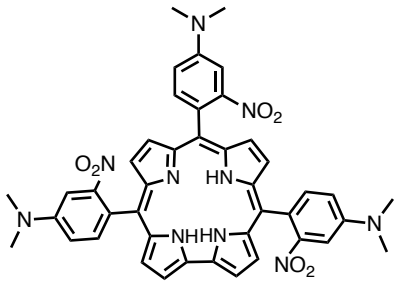



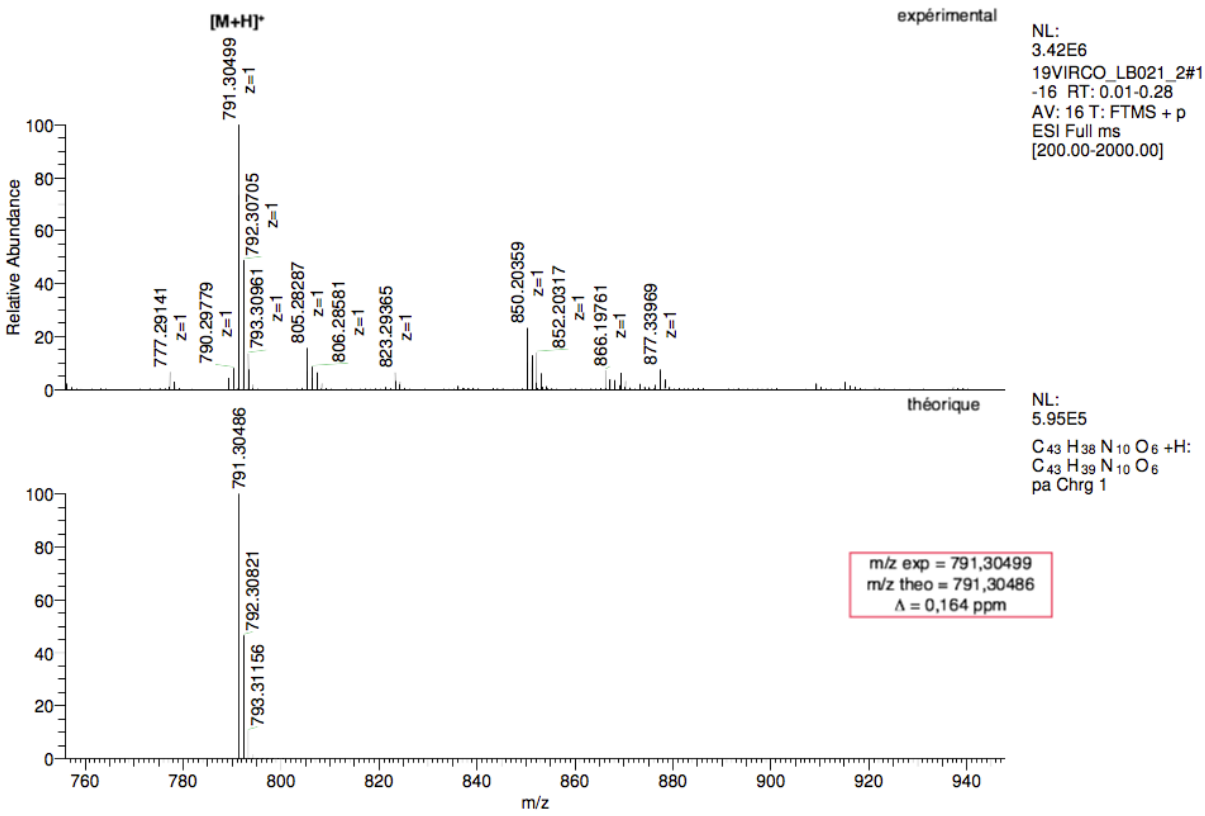

**Figure S19:** HPLC chromatogram of 5,10,15-tris(2'-nitro-4'-trifluoromethyl)corrole **4.**

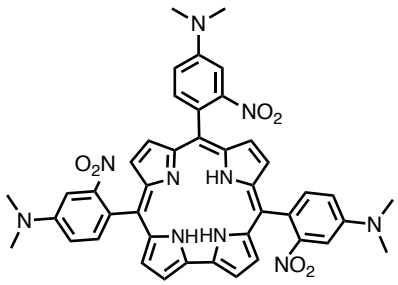



Chemical Formula: $C_{43}H_{38}N_{10}O_6$
Exact Mass: 790.2976
Molecular Weight: 790.8410

**Figure S20:** MALDI/TOF LRMS of 5,10,15-tris(4'-dimethylamino-2'-nitrophenyl)corrole **5.**




Chemical Formula $[M+H]^+$: $C_{43}H_{39}N_{10}O_6$

Exact Mass: 791.30486

Experimental: 791.30499

δ (ppm) = 0.16

**Figure S21:** ESI HRMS of 5,10,15-tris(4'-dimethylamino-2'-nitrophenyl)corrole **5.**

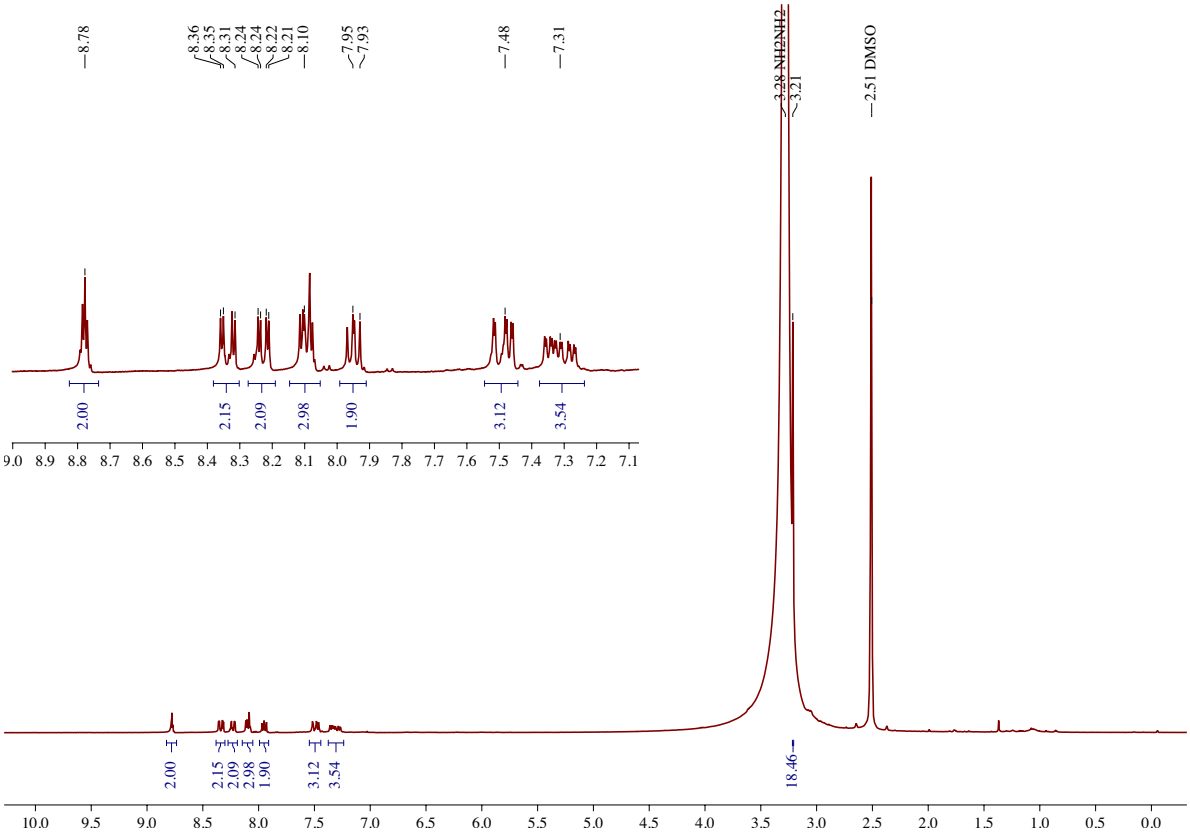


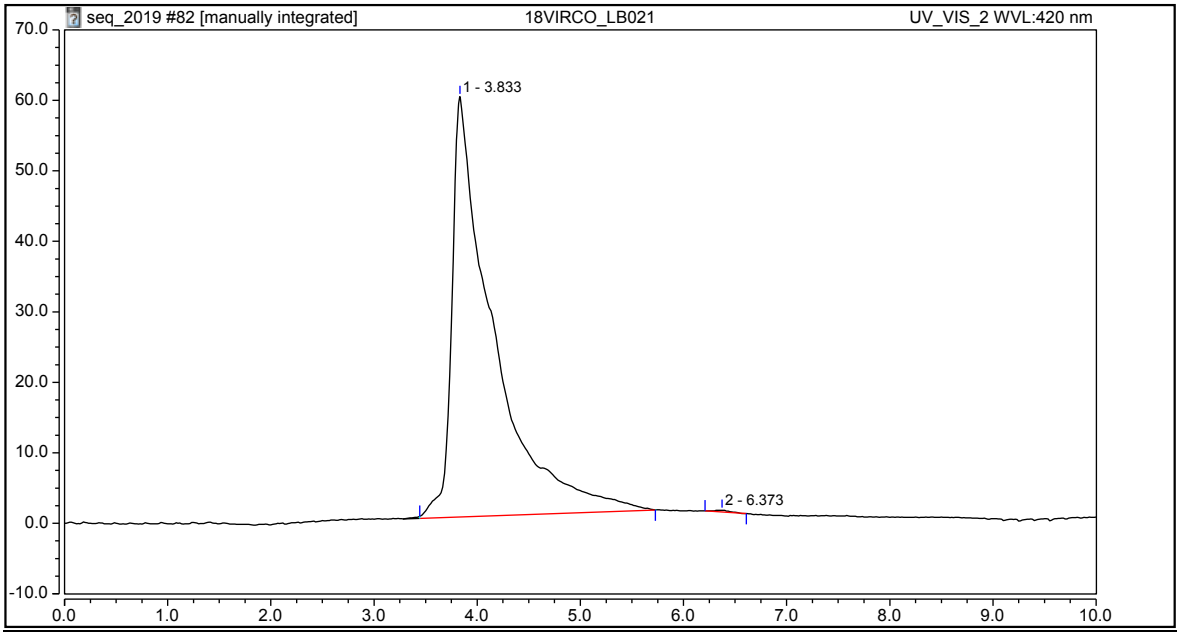

**Figure S22:** $^{1}$H NMR (500 MHz, DMSO-$d_6$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-dimethylamino-2'-nitrophenyl)corrole **5.**

Chromatogram and Results

**Injection Details**

| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB021** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA1** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 18:23** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.833 | 27.596 | 59.616 | 99.86 | 99.58 | n.a. |
| 2 | | 6.373 | 0.040 | 0.251 | 0.14 | 0.42 | n.a. |
| **Total:** | | | **27.636** | **59.867** | **100.00** | **100.00** | |

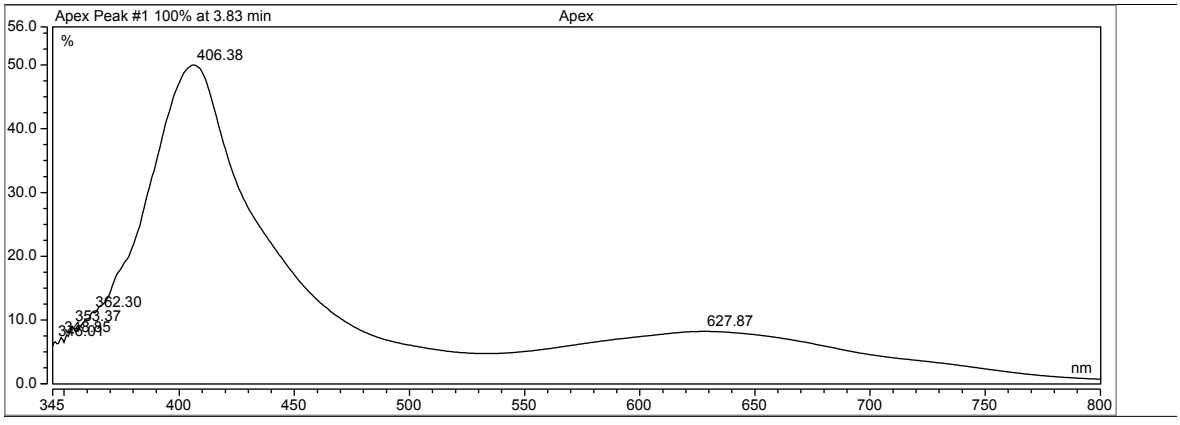
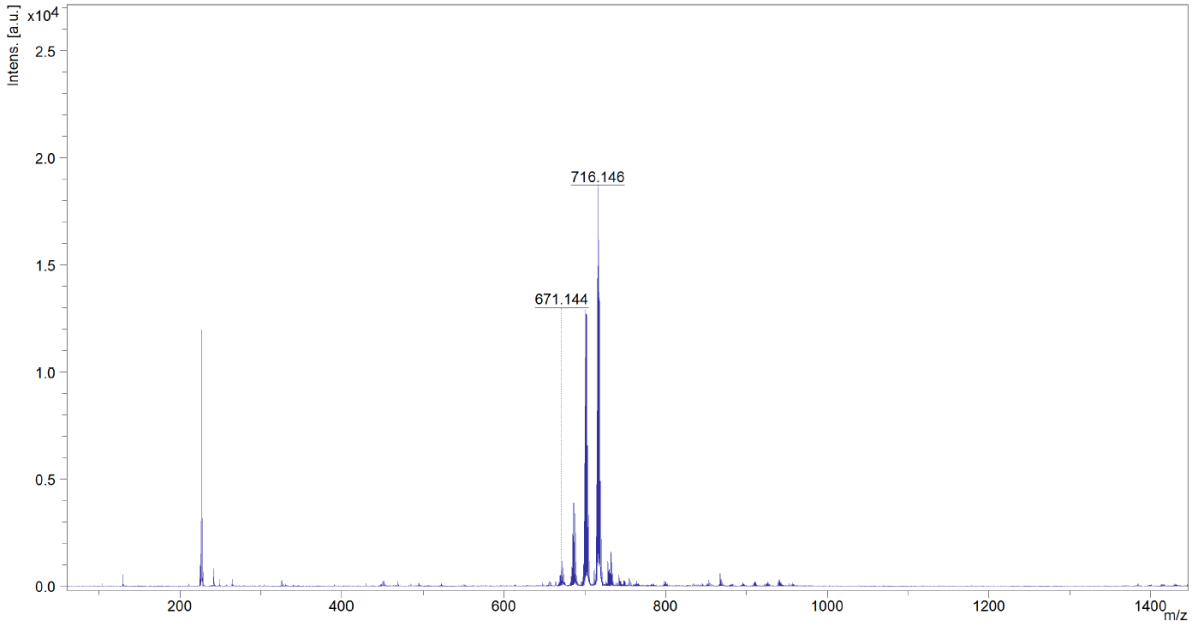
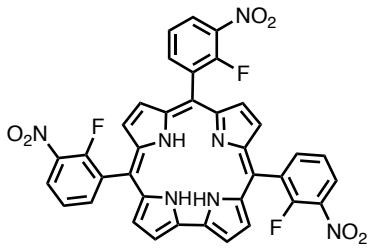


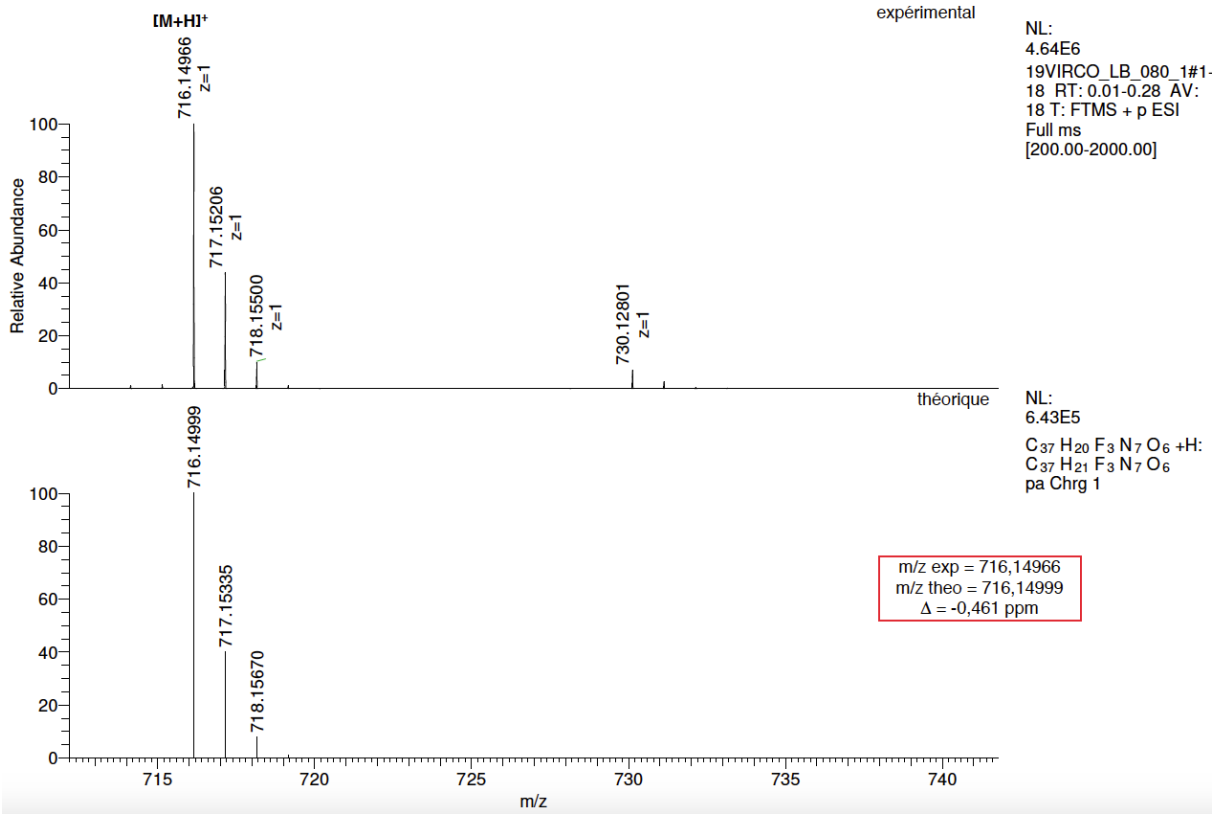

**Figure S23:** HPLC chromatogram of 5,10,15-tris(4'-dimethylamino-2'-nitrophenyl)corrole **5.**

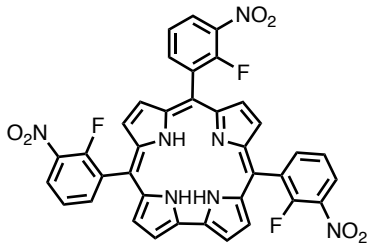



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure 24:** MALDI/TOF LRMS of 5,10,15-tris(2'-fluoro-3'-nitrophenyl)corrole **6.**




Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$

Exact Mass: 716.14966

Experimental: 716.14999

δ (ppm) = 0.461

**Figure S25:** ESI HRMS of 5,10,15-tris(2'-fluoro-3'-nitrophenyl)corrole **6.**

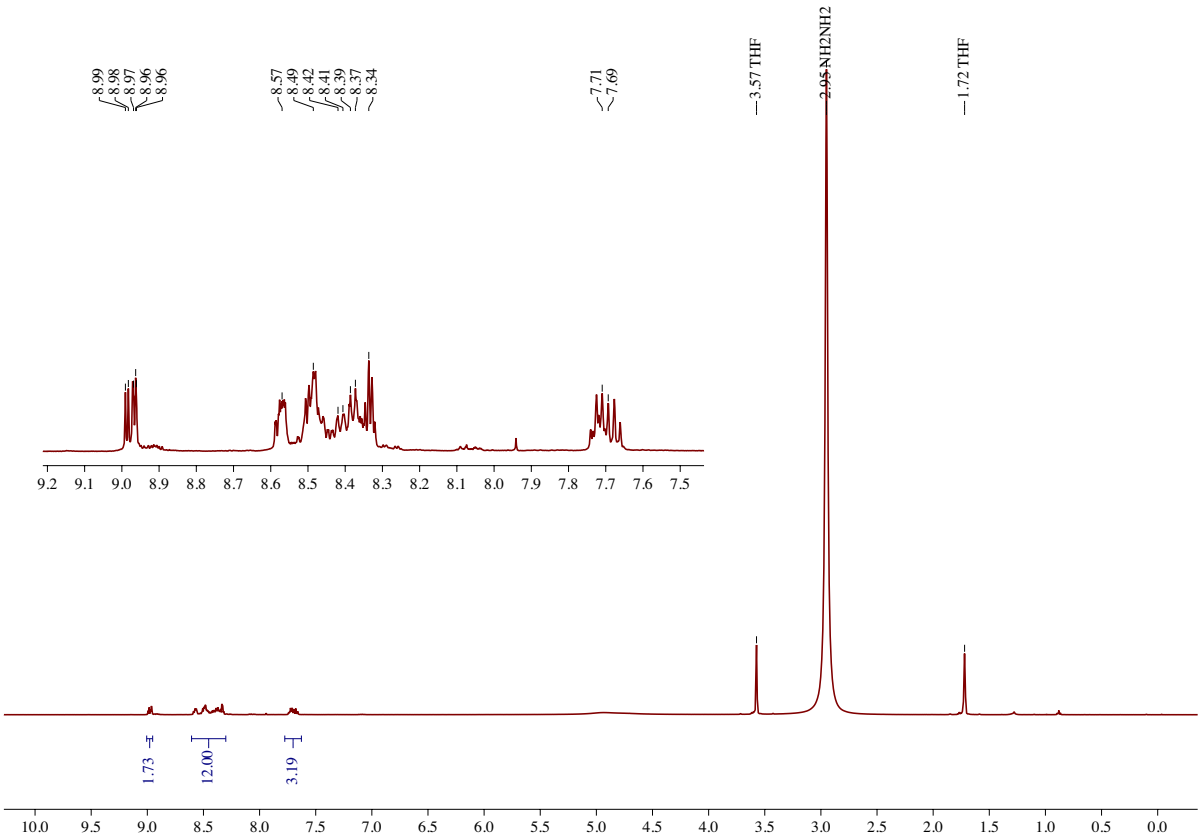



**Figure S26:** $^{1}$H NMR (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-3'-nitrophenyl)corrole **6.**

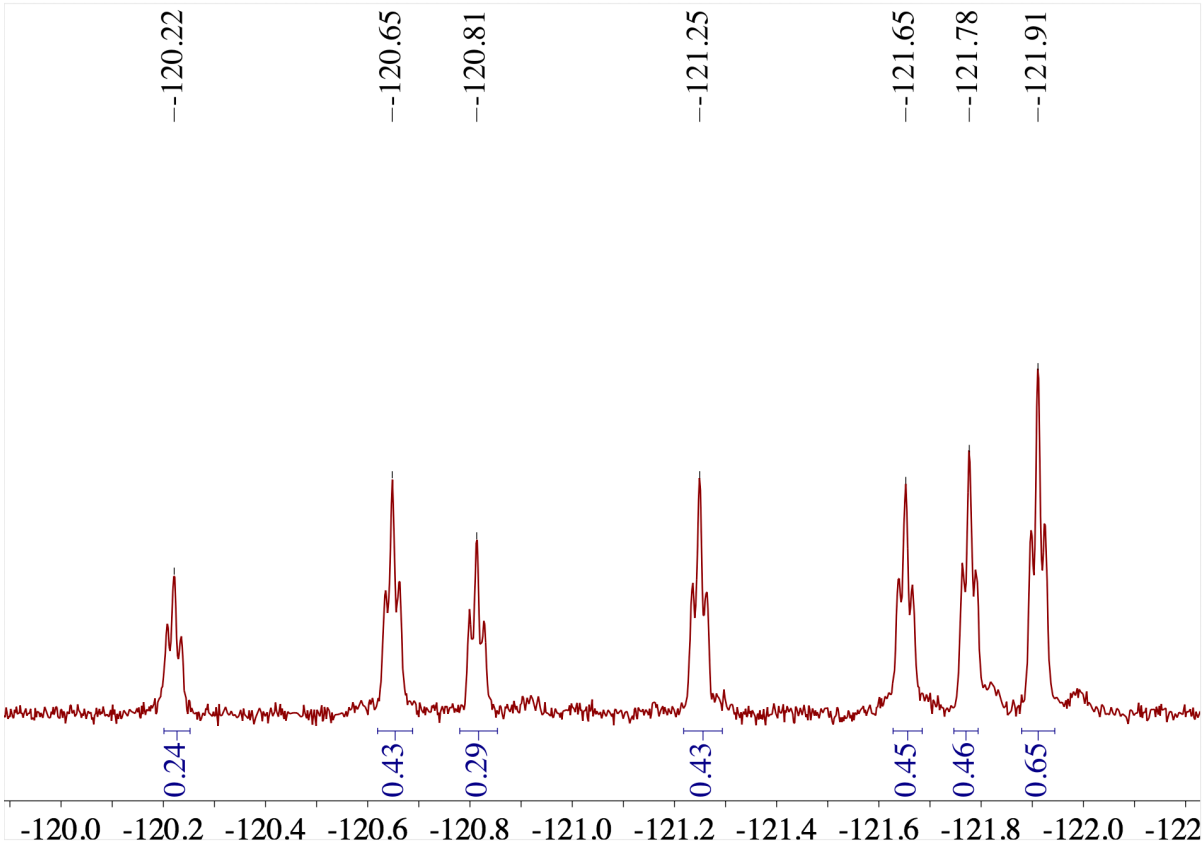


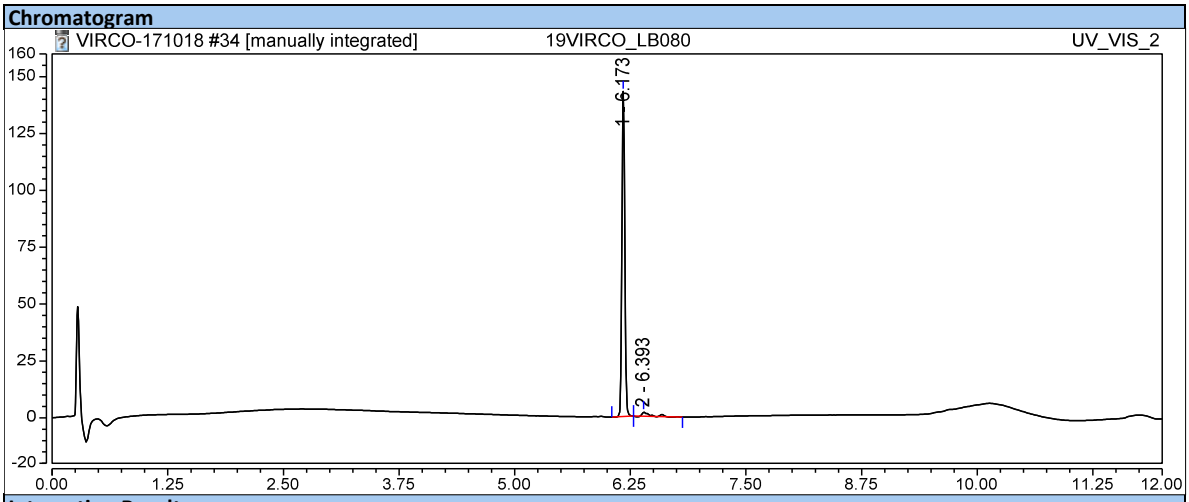

**Figure S27:** $^{19}$F NMR (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-3'-nitrophenyl)corrole **6.**

## Chromatogram and Results

**Injection Details**

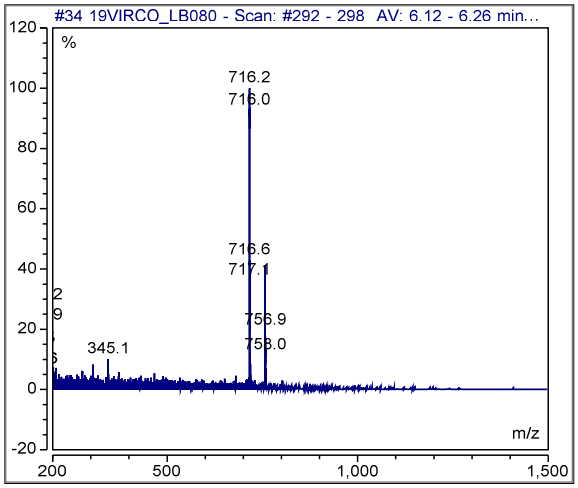
| | | | |
|---|---|---|---|
| *Injection Name:* | **19VIRCO_LB080** | *Run Time (min):* | **12.00** |
| *Vial Number:* | **RB1** | *Injection Volume:* | **10.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **400.0** |
| *Instrument Method:* | **Corroles-LB-Kinetex** | *Bandwidth:* | **4** |
| *Processing Method:* | **no integration** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **27/Feb/19 11:34** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 6.173 | 5.150 | 142.904 | 96.97 | 98.66 | n.a. |
| 2 | | 6.393 | 0.161 | 1.935 | 3.03 | 1.34 | n.a. |
| **Total:** | | | **5.312** | **144.840** | **100.00** | **100.00** | |



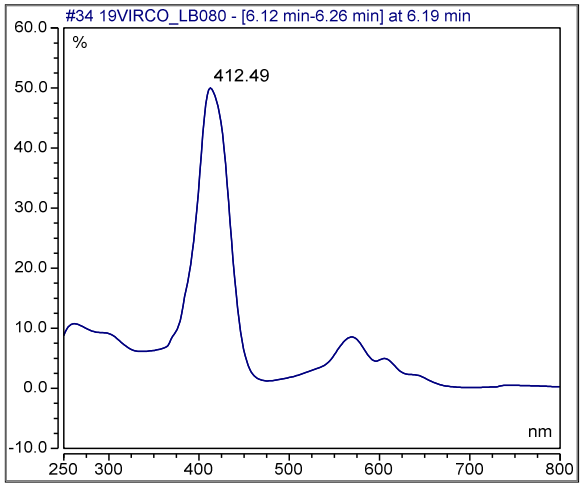
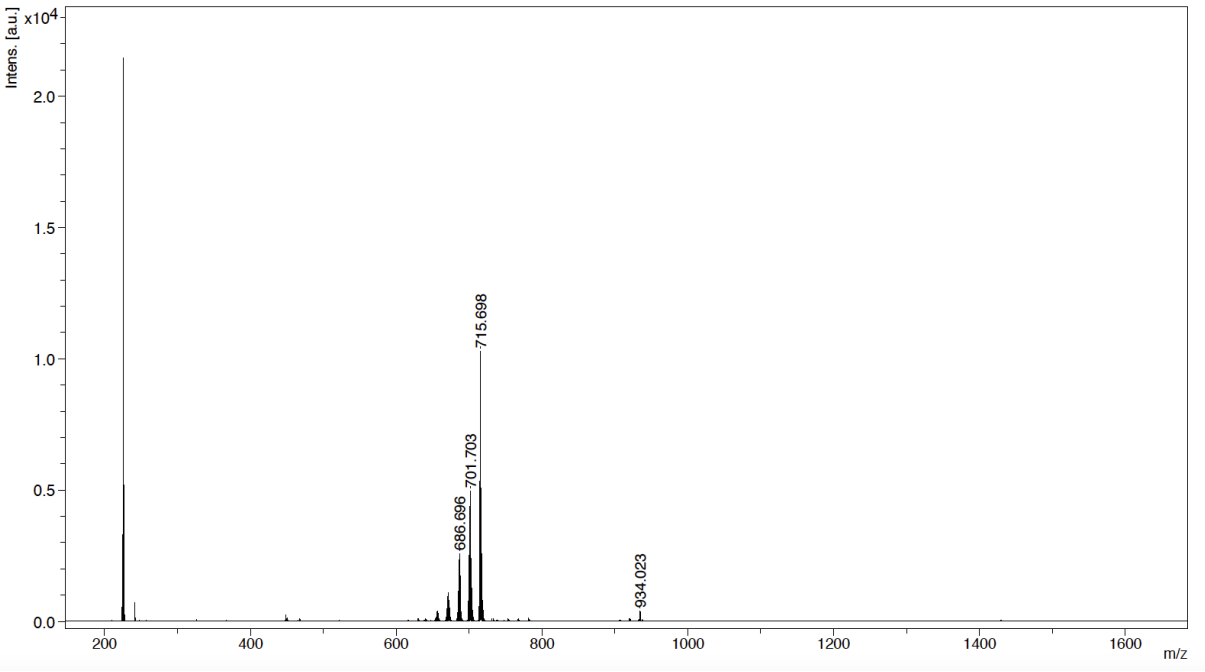
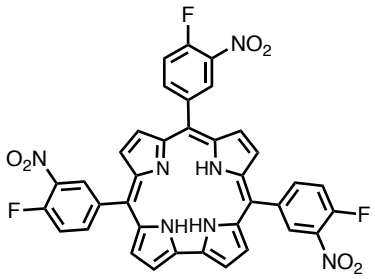




**Figure S28:** HPLC chromatogram of 5,10,15-tris(2'-fluoro-3'-nitrophenyl)corrole **6.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S29:** MALDI/TOF LRMS of 5,10,15-tris(4'-fluoro-3'-nitrophenyl)corrole **7.**

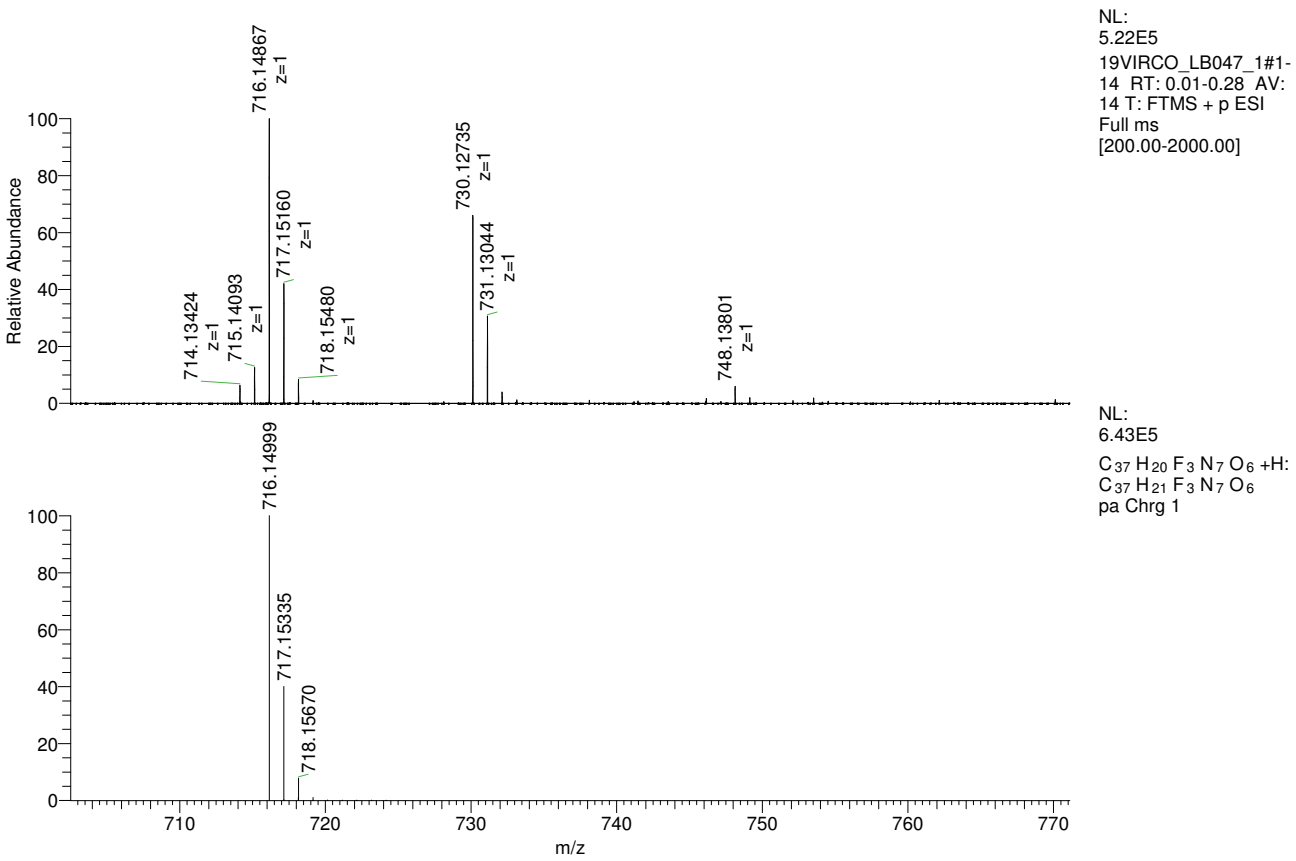
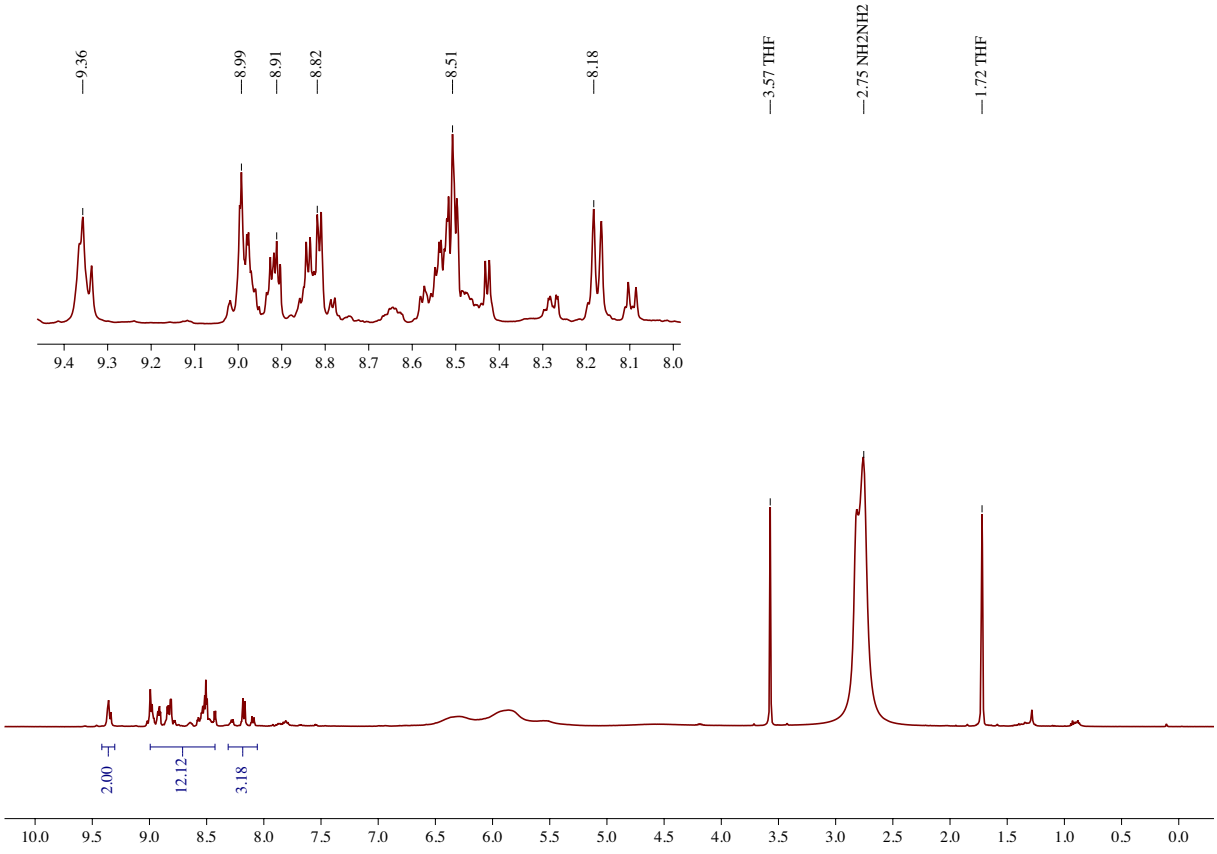
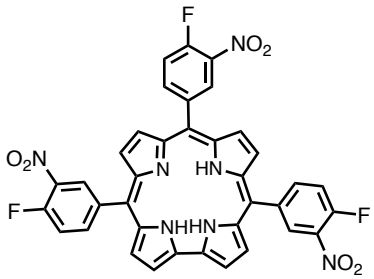



**Figure S30:** ESI HRMS of 5,10,15-tris(4'-fluoro-3'-nitrophenyl)corrole **7.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S31:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-fluoro-3'-nitrophenyl)corrole **7.**

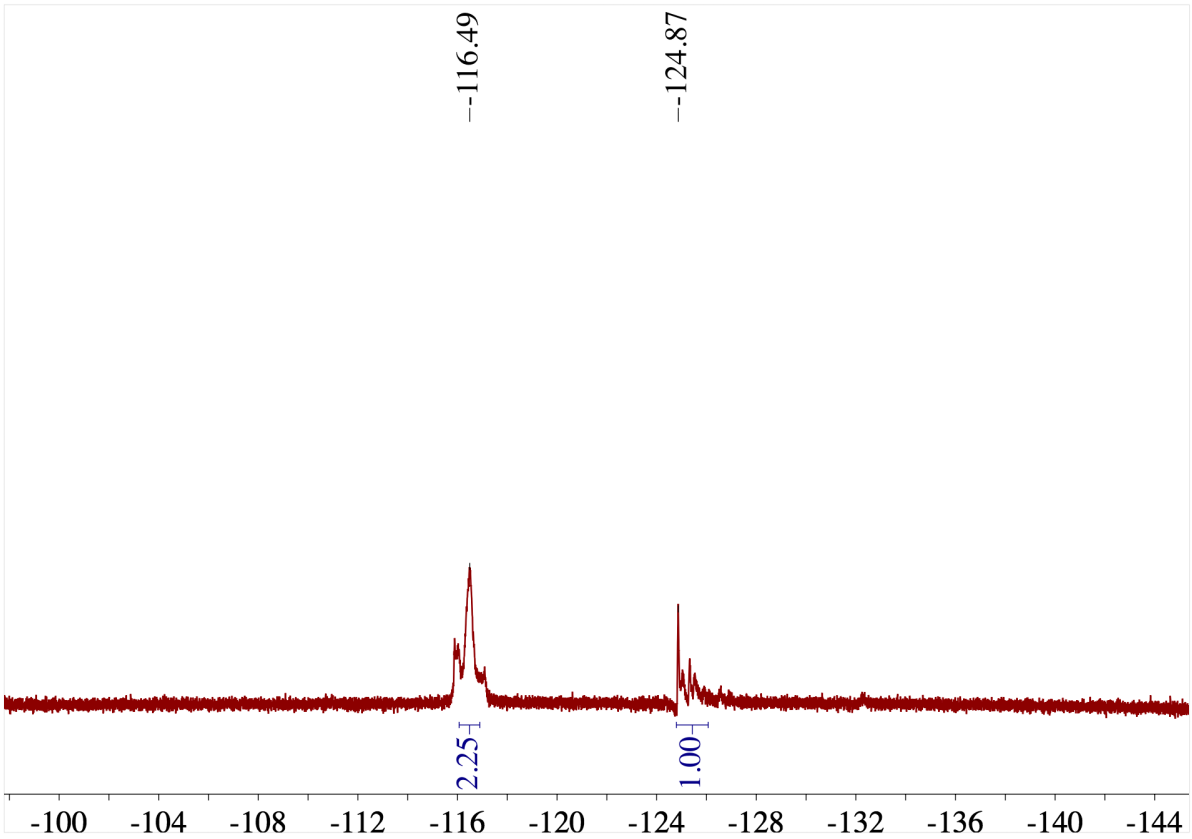


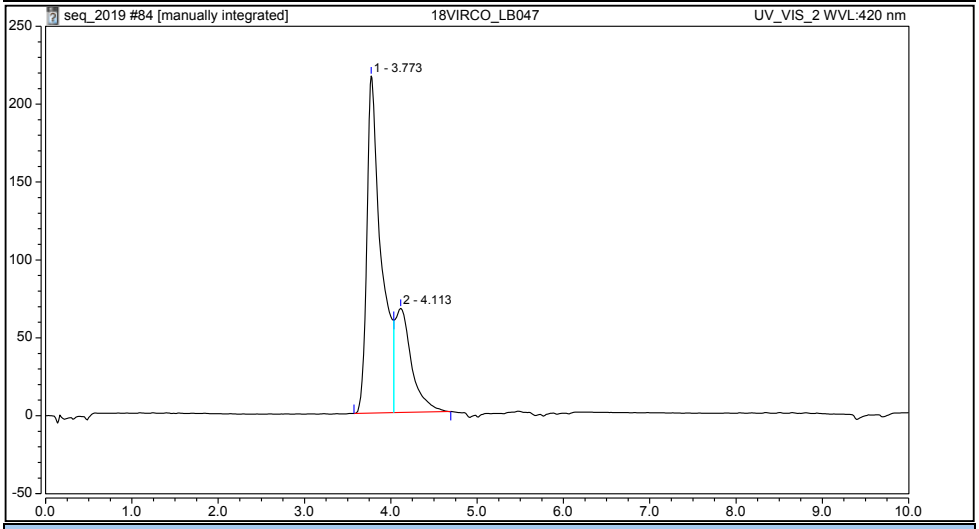

**Figure S32:** $^{19}$F NMR (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-fluoro-3'-nitrophenyl)corrole **7.**

Chromatogram and Results

**Injection Details**

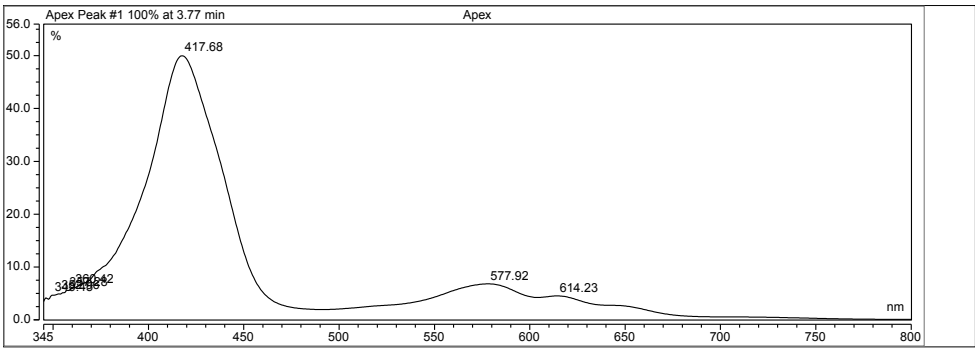
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB047** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA2** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 18:46** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.773 | 41.223 | 216.505 | 73.30 | 76.40 | n.a. |
| 2 | | 4.113 | 15.016 | 66.872 | 26.70 | 23.60 | n.a. |
| **Total:** | | | **56.239** | **283.377** | **100.00** | **100.00** | |



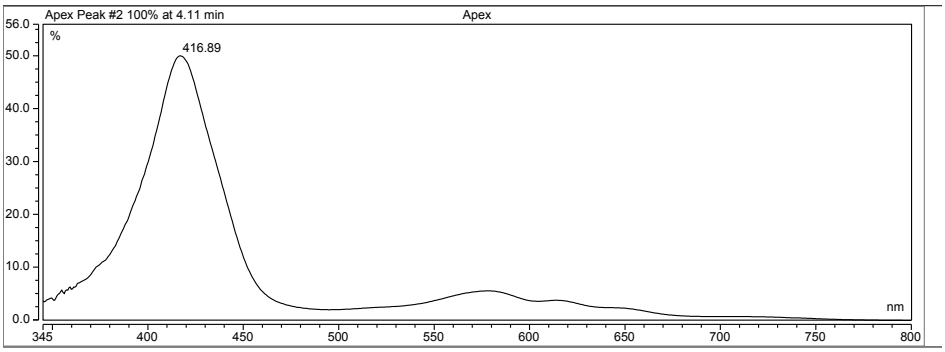
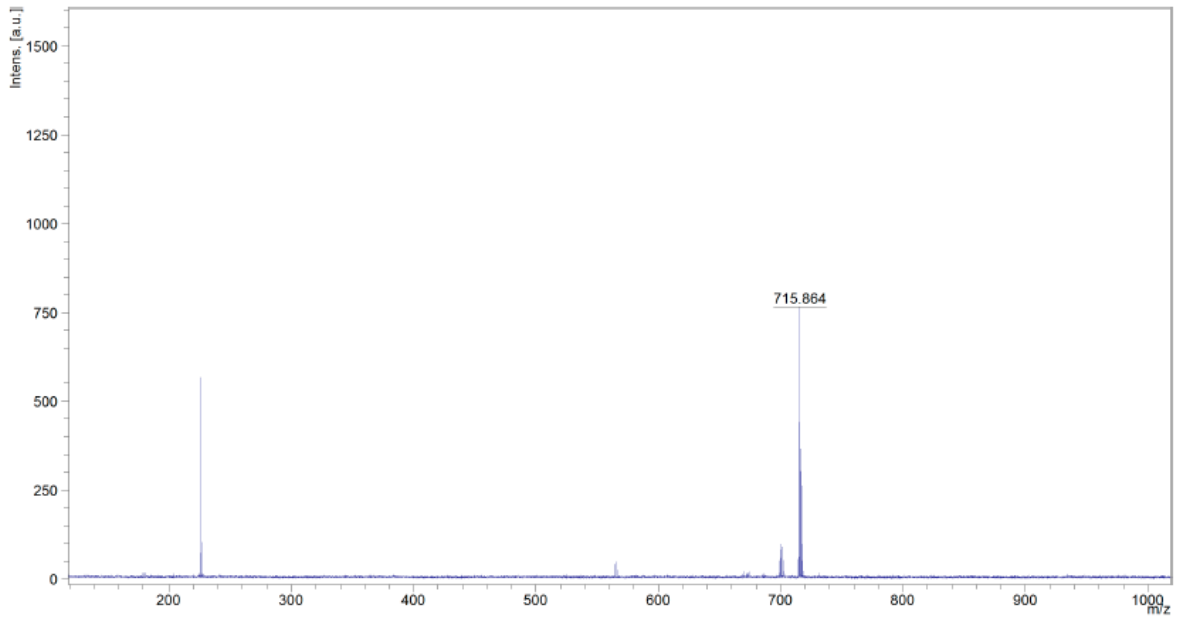
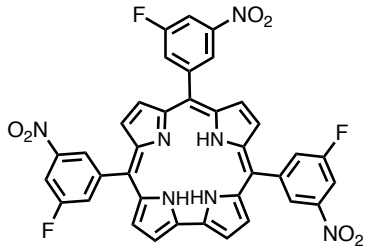



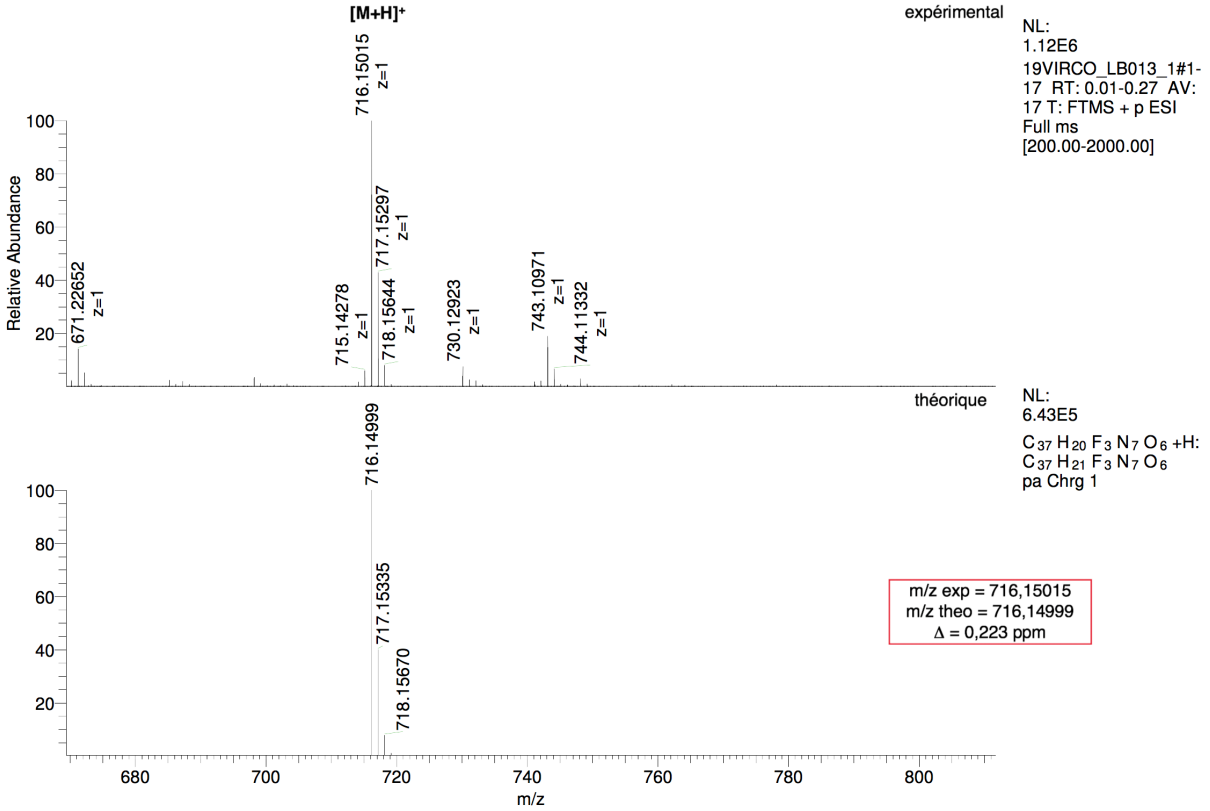

**Figure S33:** HPLC chromatogram of 5,10,15-tris(4'-fluoro-3'-nitrophenyl)corrole **7.**

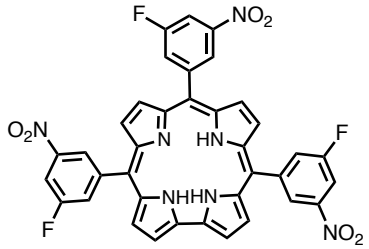



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S34:** MALDI/TOF LRMS of 5,10,15-tris(3'-fluoro-5'-nitrophenyl)corrole **8.**



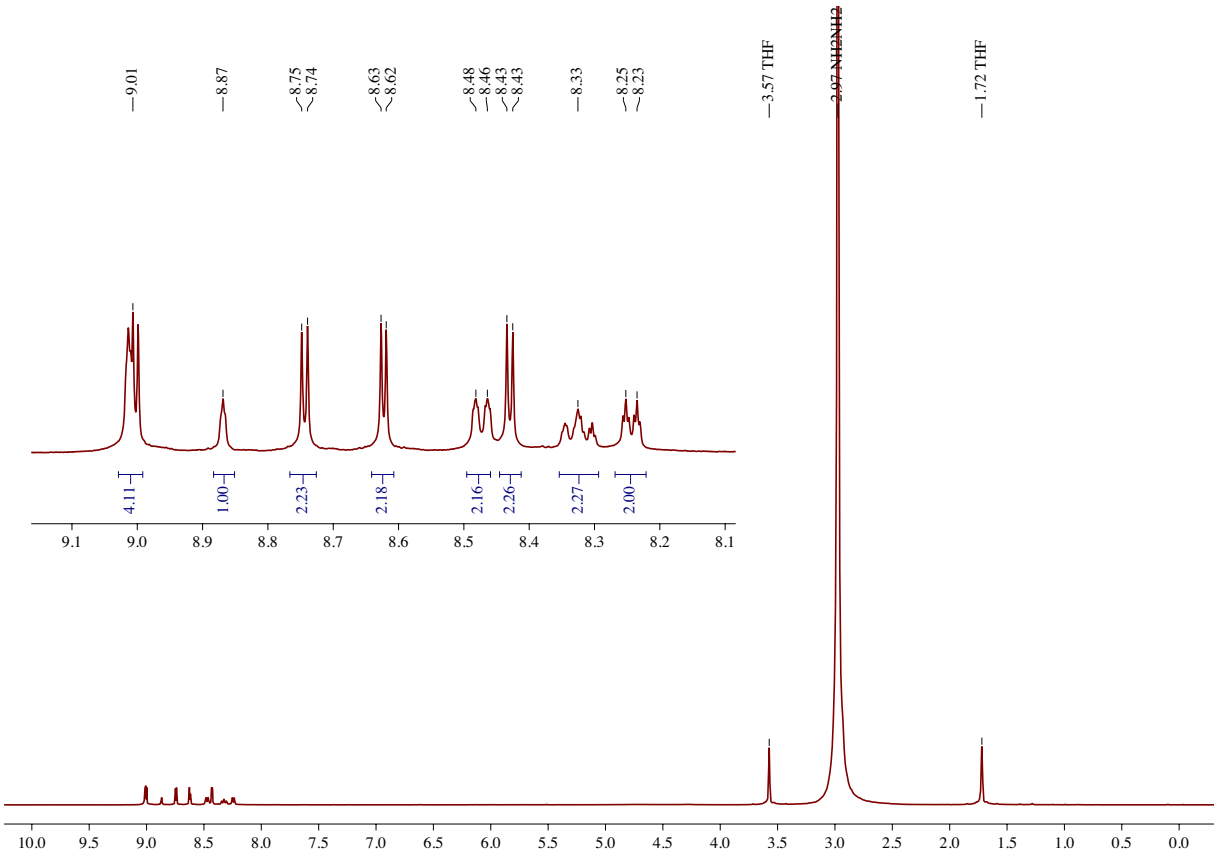

Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$

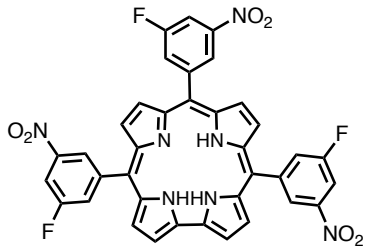
Exact Mass: 716.14999

Experimental: 716.15015

δ (ppm) = 0.22

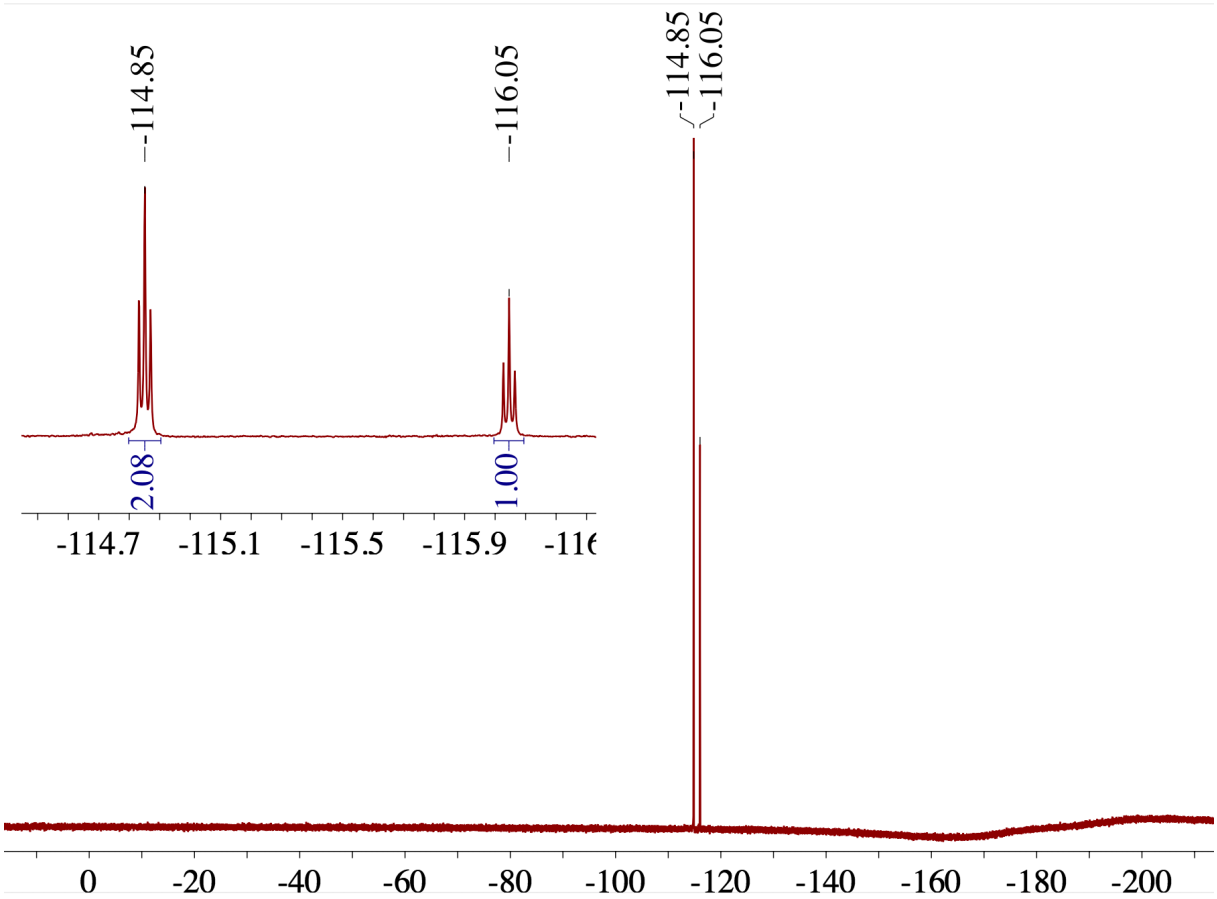
**Figure S35:** ESI HRMS of 5,10,15-tris(3'-fluoro-5'-nitrophenyl)corrole **8.**

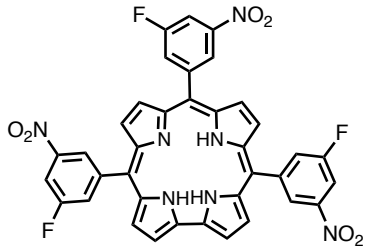



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S36:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(3'-fluoro-5'-nitrophenyl)corrole **8.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

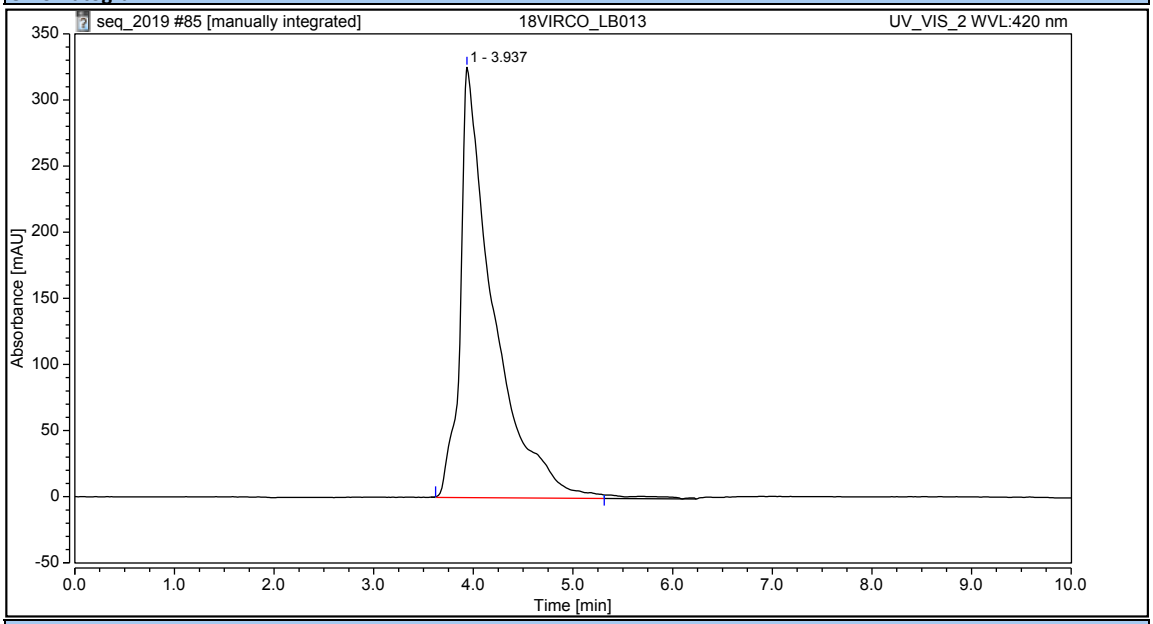
**Figure S37:** $^{19}F$ NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(3'-fluoro-5'-nitrophenyl)corrole **8.**

Chromatogram and Results

**Injection Details**

| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB013** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA3** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 18:57** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.937 | 124.093 | 325.305 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **124.093** | **325.305** | **100.00** | **100.00** | |

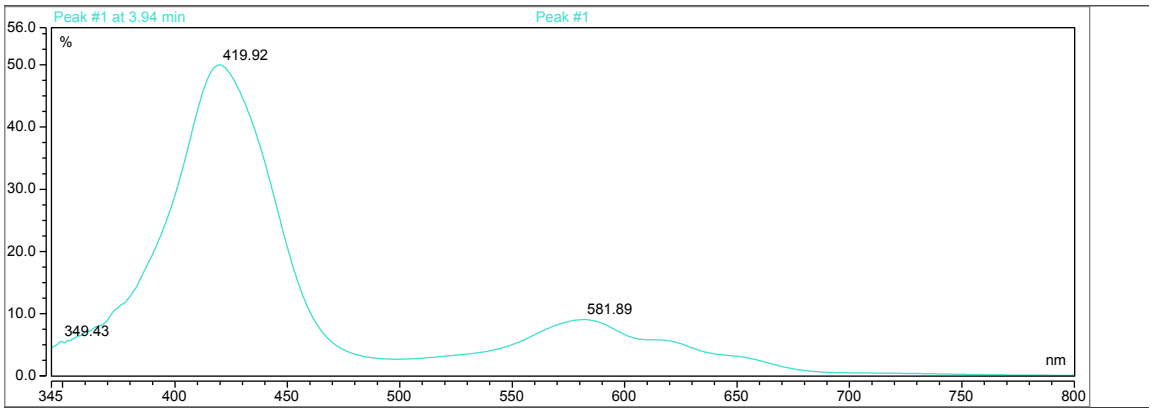
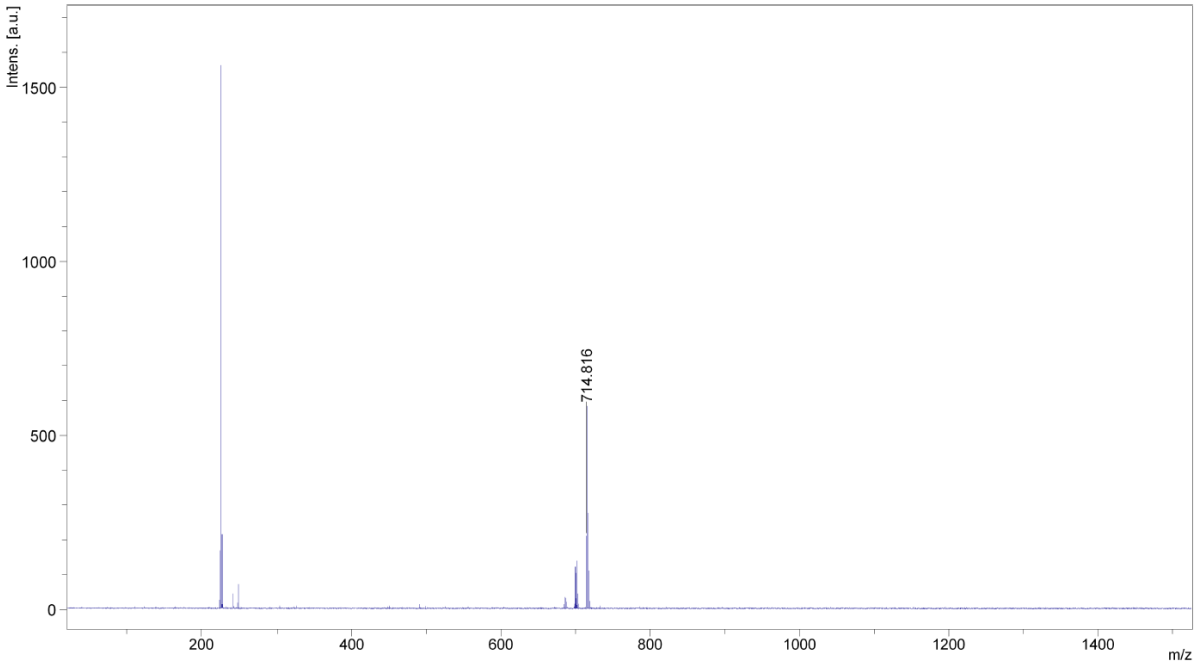
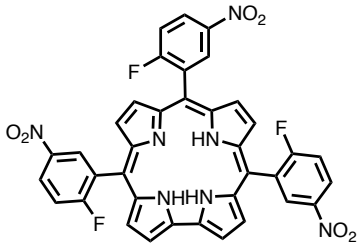


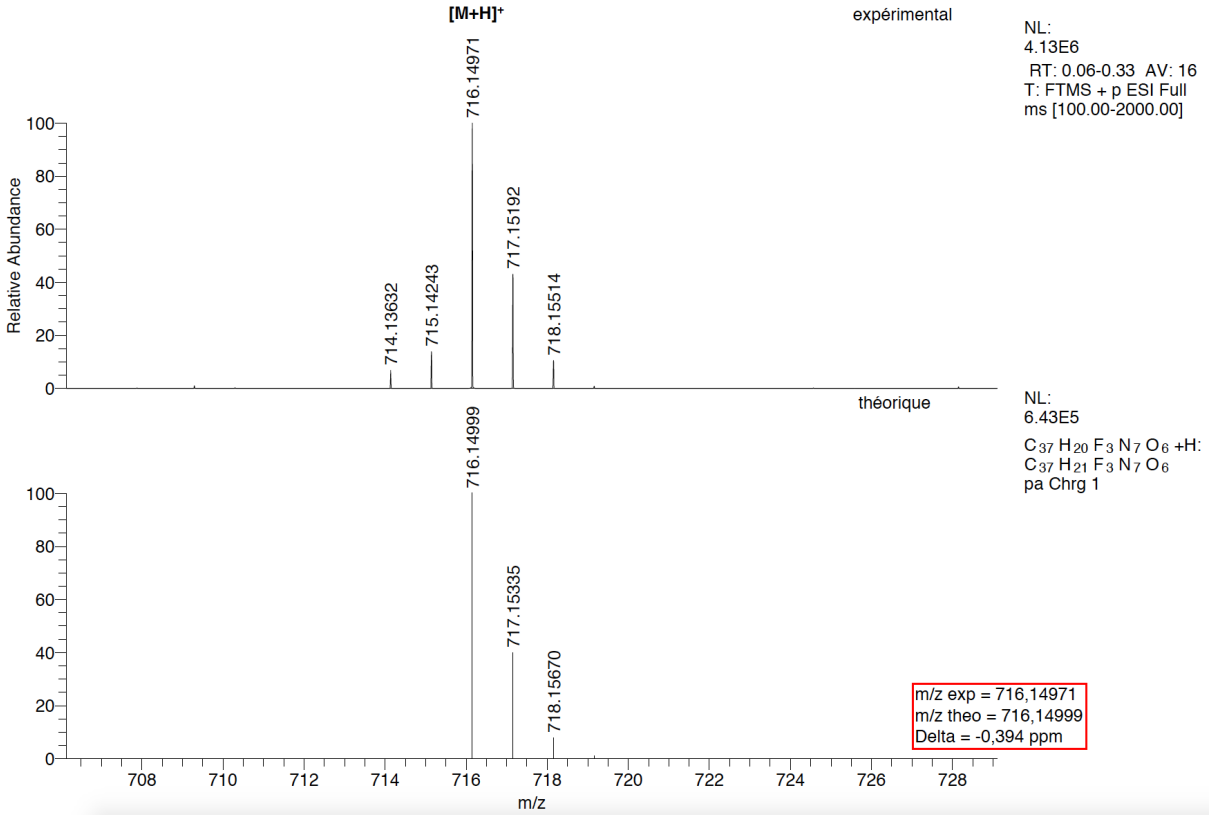

**Figure S38:** HPLC chromatogram of 5,10,15-tris(3'-fluoro-5'-nitrophenyl)corrole **8.**

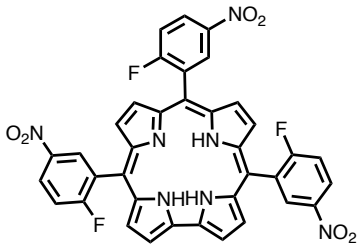



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S39:** MALDI/TOF LRMS of 5,10,15-tris(2'-fluoro-5'-nitrophenyl)corrole **9.**



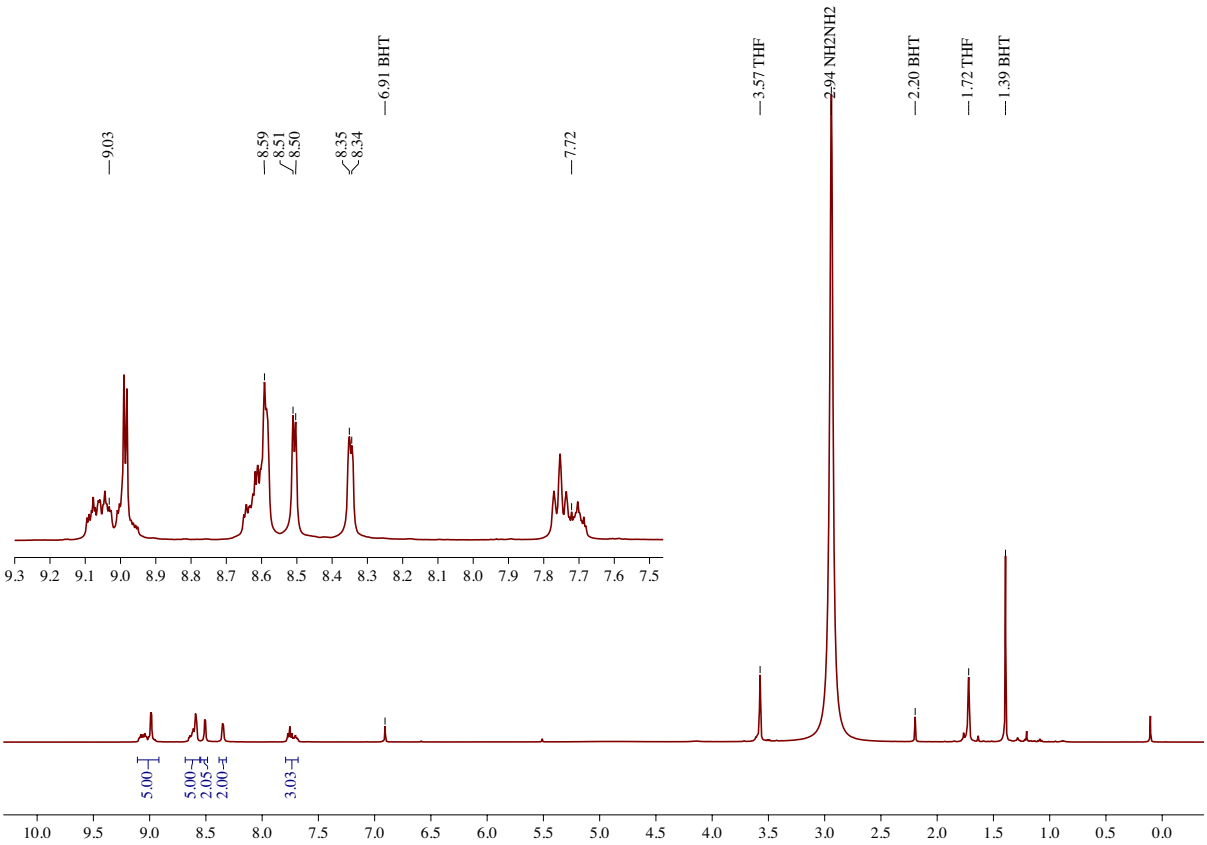

Chemical Formula[M+H]$^+$: $C_{37}H_{21}F_3N_7O_6$

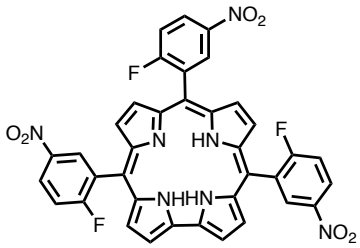
Exact Mass: 716.14999

Experimental: 716.14971

δ (ppm) = 0.39

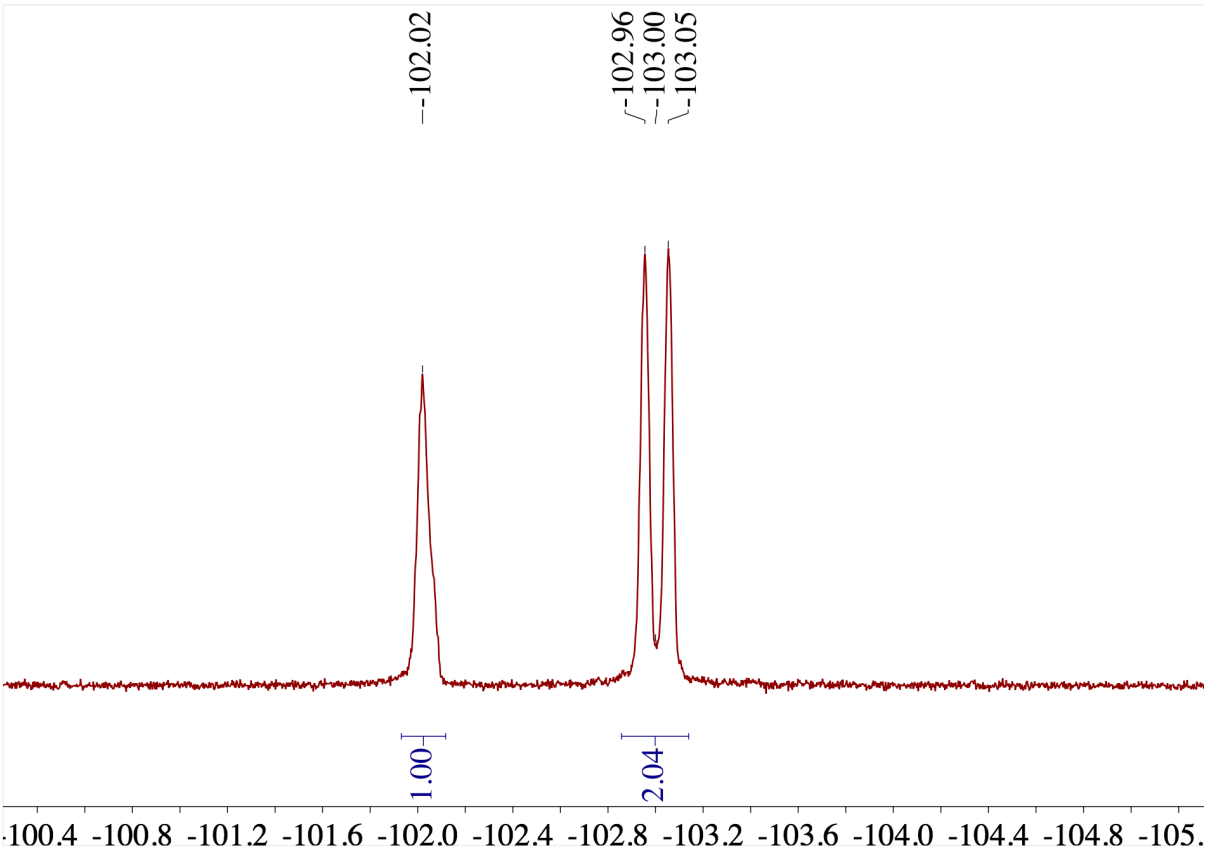
**Figure S40:** ESI HRMS of 5,10,15-tris(2'-fluoro-5'-nitrophenyl)corrole **9.**

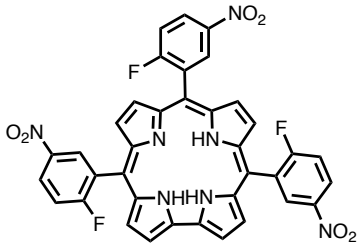



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S41:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-5'-nitrophenyl)corrole **9.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

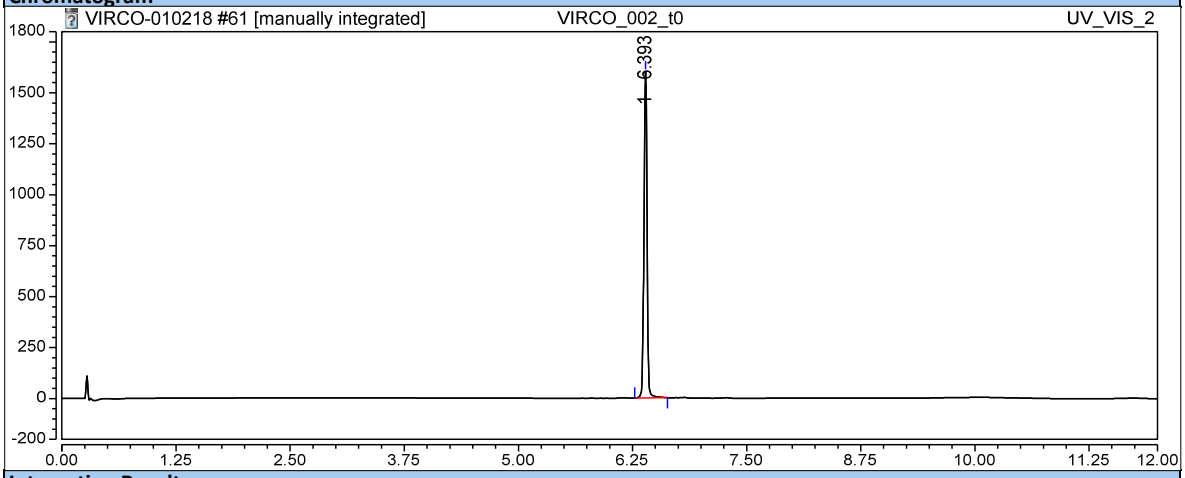
**Figure S42:** $^{19}F$ NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-5'-nitrophenyl)corrole **9.**

## Chromatogram and Results

**Injection Details**

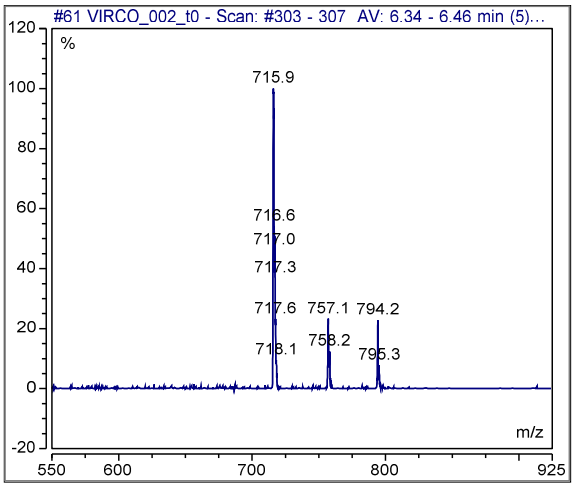
| | | | |
|---|---|---|---|
| *Injection Name:* | **VIRCO_002_t0** | *Run Time (min):* | **12.00** |
| *Vial Number:* | **GC2** | *Injection Volume:* | **10.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **400.0** |
| *Instrument Method:* | **Corroles-LB-Kinetex** | *Bandwidth:* | **4** |
| *Processing Method:* | **no integration** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **04/Sep/18 09:41** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 6.393 | 63.286 | 1598.915 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **63.286** | **1598.915** | **100.00** | **100.00** | |



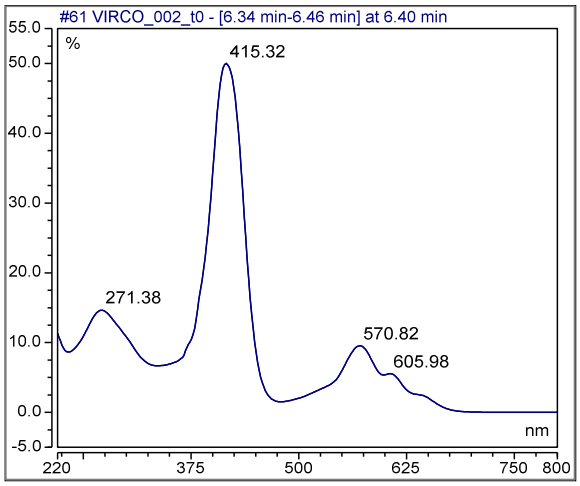
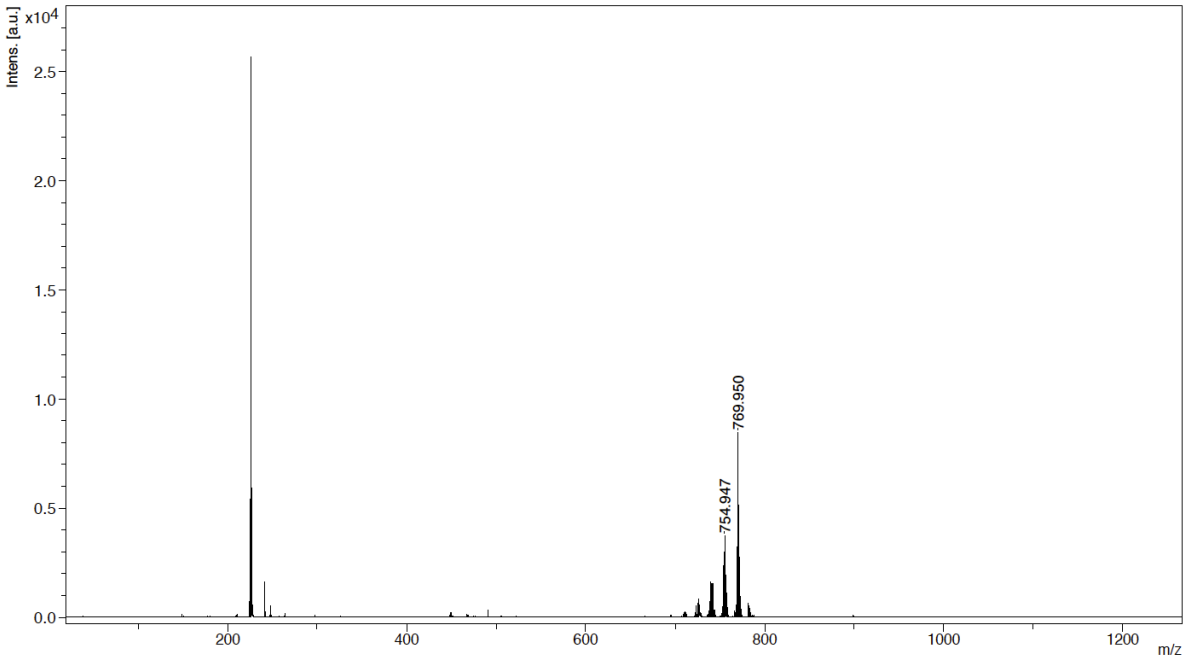
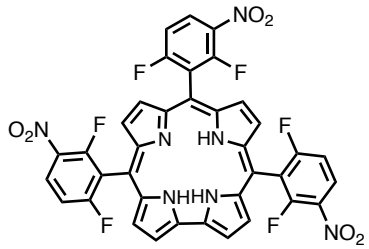



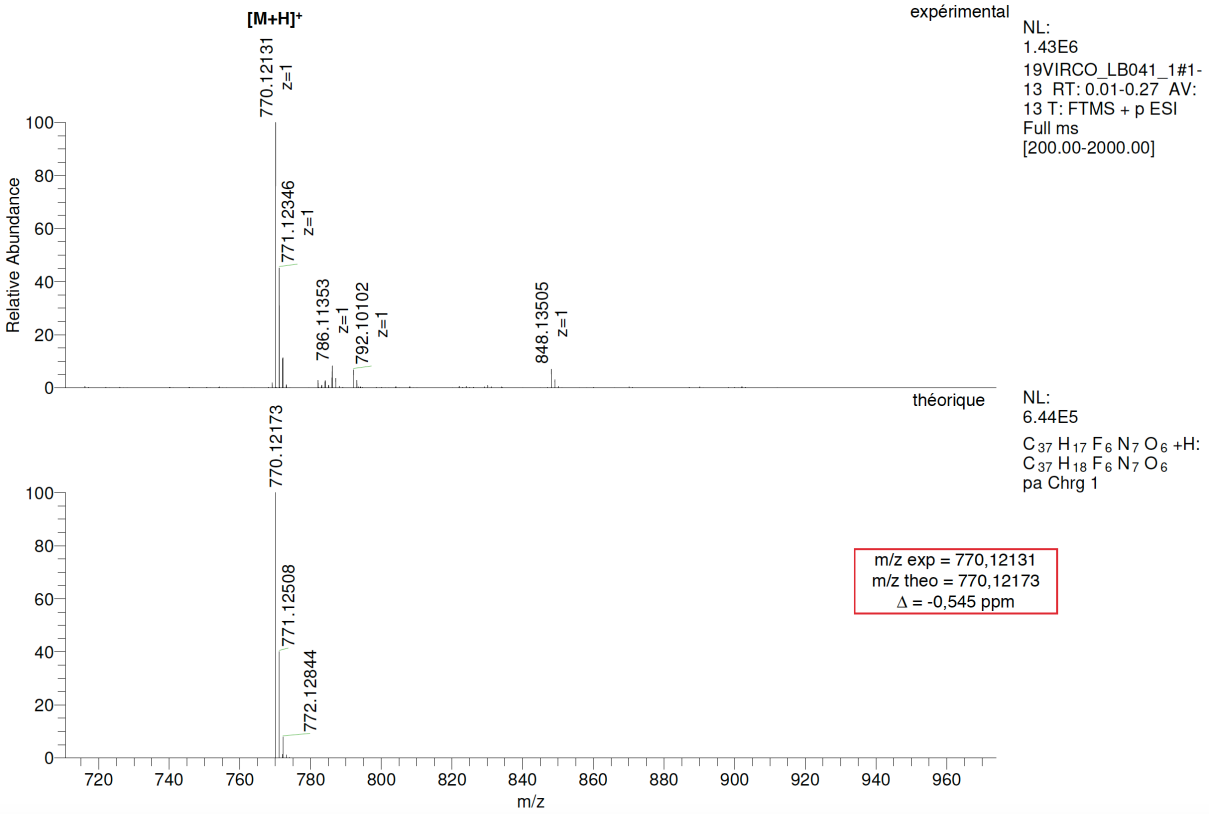

**Figure S43:** HPLC chromatogram of 5,10,15-tris(2'-fluoro-5'-nitrophenyl)corrole **9.**

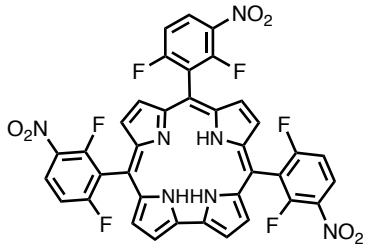



Chemical Formula: $C_{37}H_{17}F_6N_7O_6$
Exact Mass: 769.1145
Molecular Weight: 769.5764

**Figure S44:** MALDI/TOF LRMS of 5,10,15-tris(2',6'-difluoro-3'-nitrophenyl)corrole **10.**



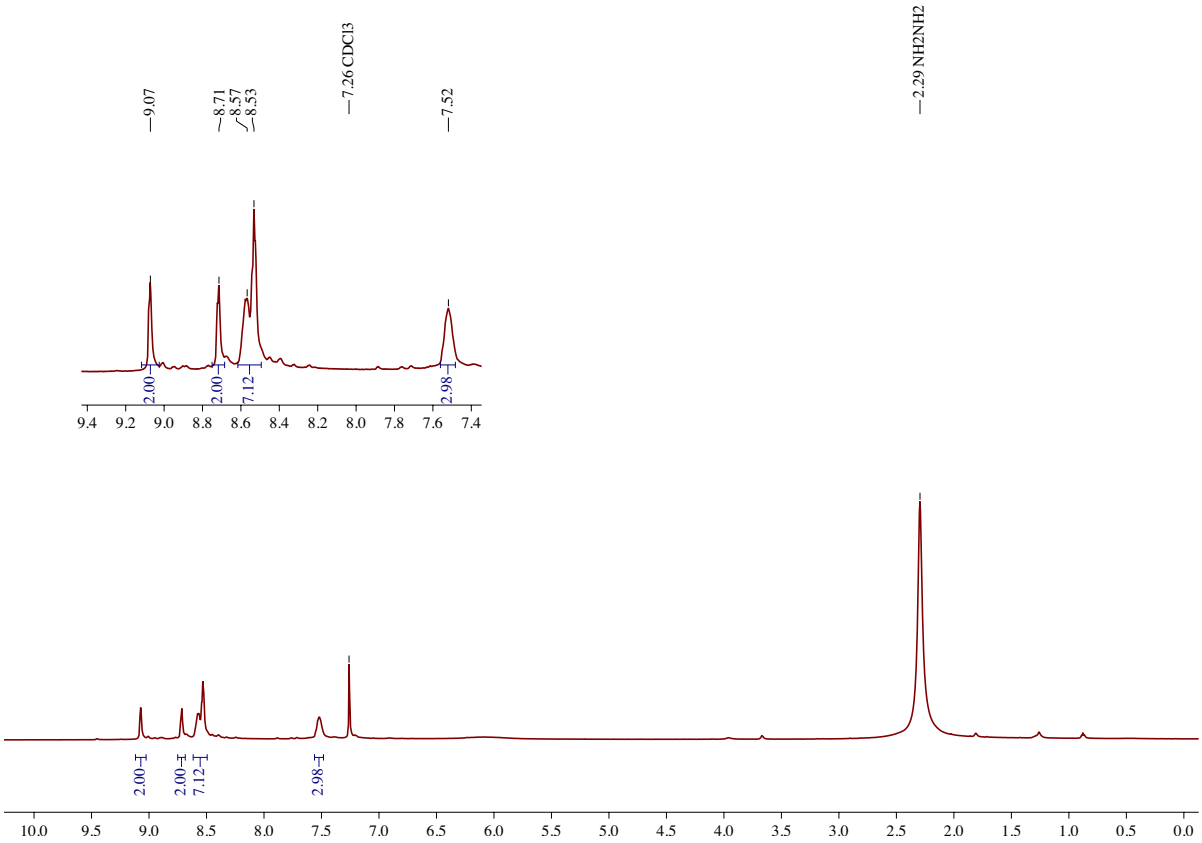

Chemical Formula $[M+H]^+$: $C_{37}H_{18}F_6N_7O_6$

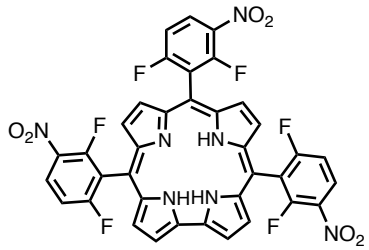
Exact Mass: 770.12173

Experimental: 770.12131

δ (ppm) = 0.54

**Figure S45:** ESI HRMS of 5,10,15-tris(2',6'-difluoro-3'-nitrophenyl)corrole **10.**




Chemical Formula: $C_{37}H_{17}F_6N_7O_6$
Exact Mass: 769.1145
Molecular Weight: 769.5764

**Figure S46:** $^1$H NMR spectrum (500 MHz, $CDCl_3$ + one drop of hydrazine 64%) of 5,10,15-tris(2',6'-difluoro-3'-nitrophenyl)corrole **10.**

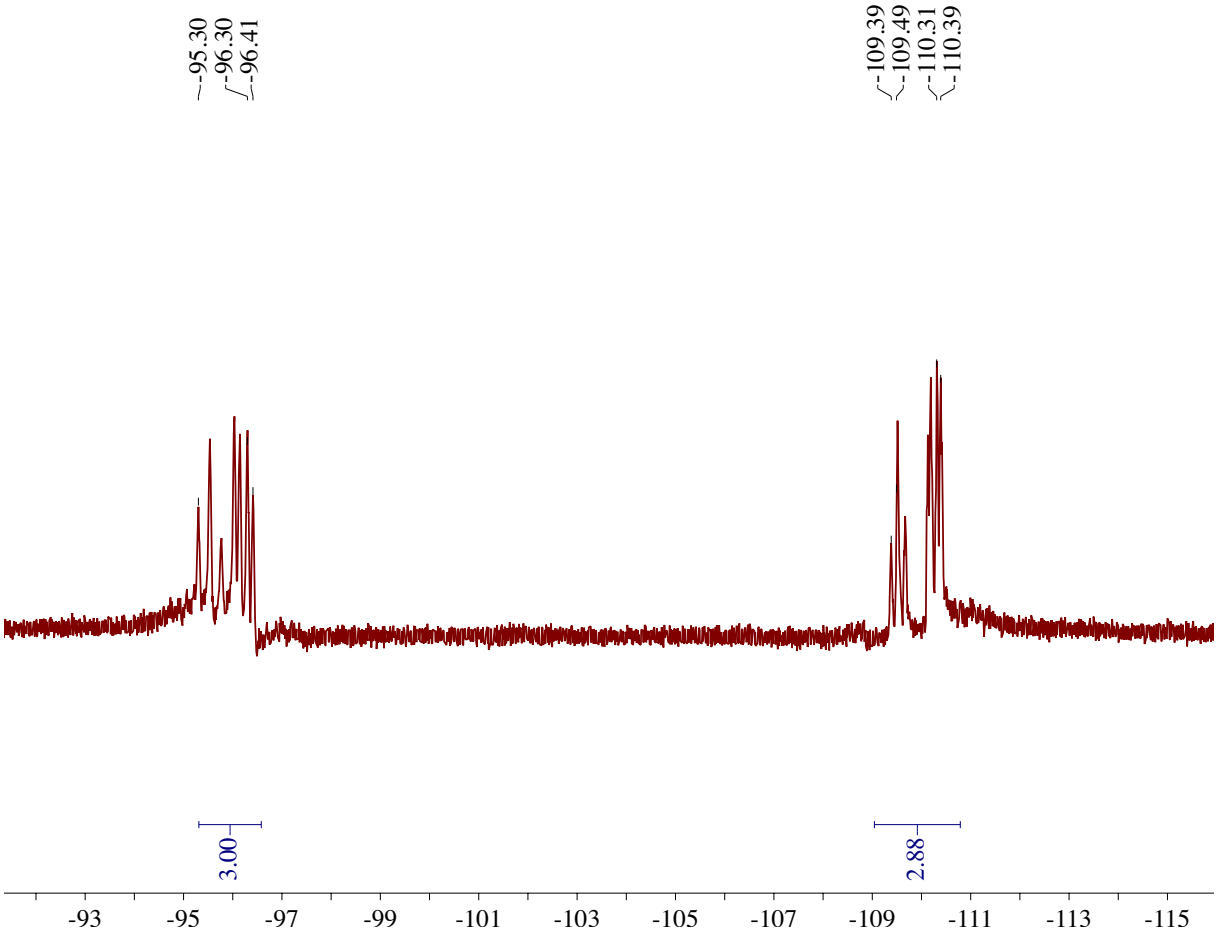


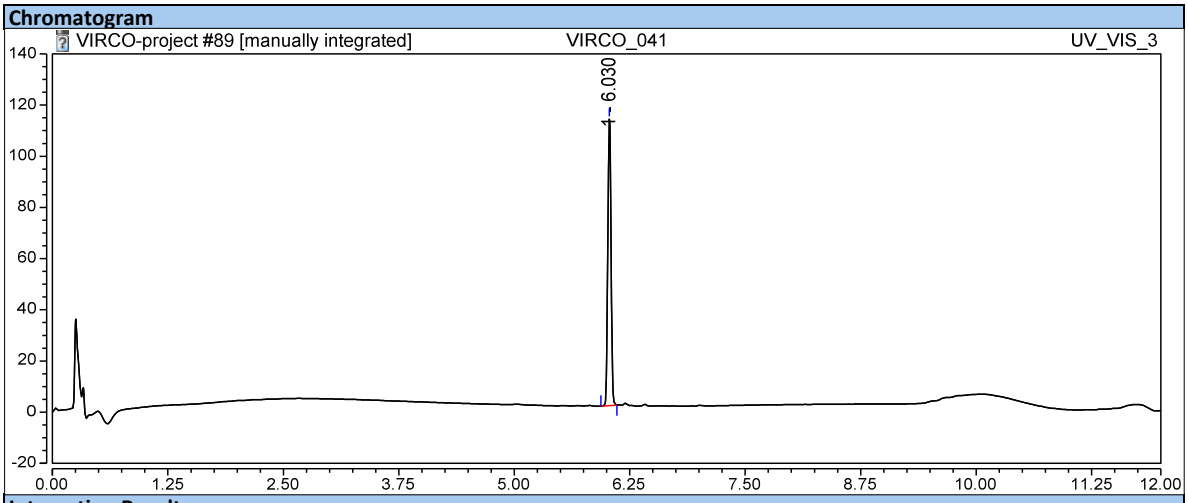

**Figure S47:** $^{19}F$ NMR spectrum (470 MHz, $CDCl_3$ + one drop of hydrazine 64%) of 5,10,15-tris(2',6'-difluoro-3'-nitrophenyl)corrole **10.**

## Chromatogram and Results

**Injection Details**

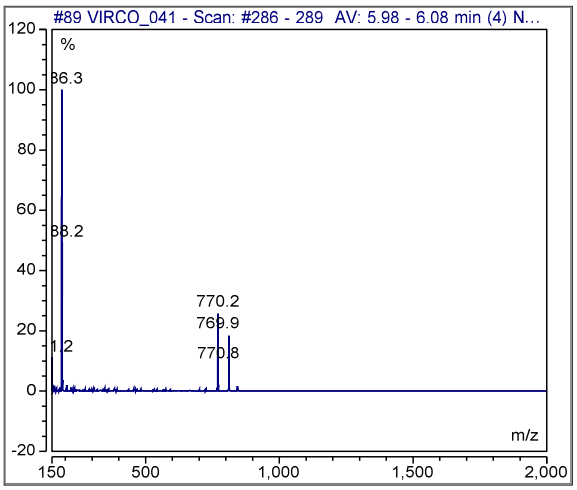
| | | | |
|---|---|---|---|
| *Injection Name:* | **VIRCO_041** | *Run Time (min):* | **12.00** |
| *Vial Number:* | **GD5** | *Injection Volume:* | **10.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_3** |
| *Calibration Level:* | | *Wavelength:* | **440.0** |
| *Instrument Method:* | **Corroles-LB-Kinetex** | *Bandwidth:* | **4** |
| *Processing Method:* | **no integration** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **25/Sep/18 09:51** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 6.030 | 4.544 | 111.976 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **4.544** | **111.976** | **100.00** | **100.00** | |



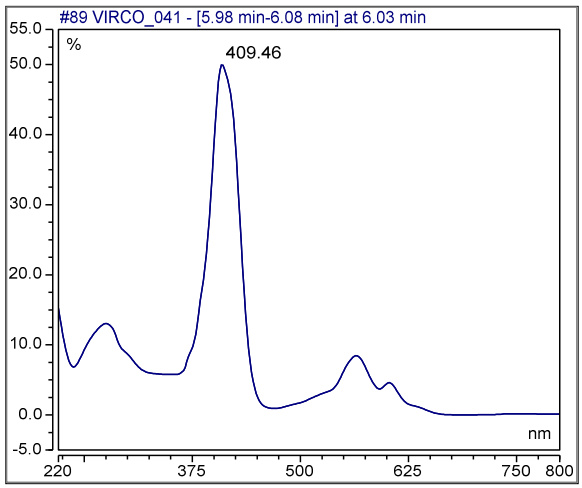
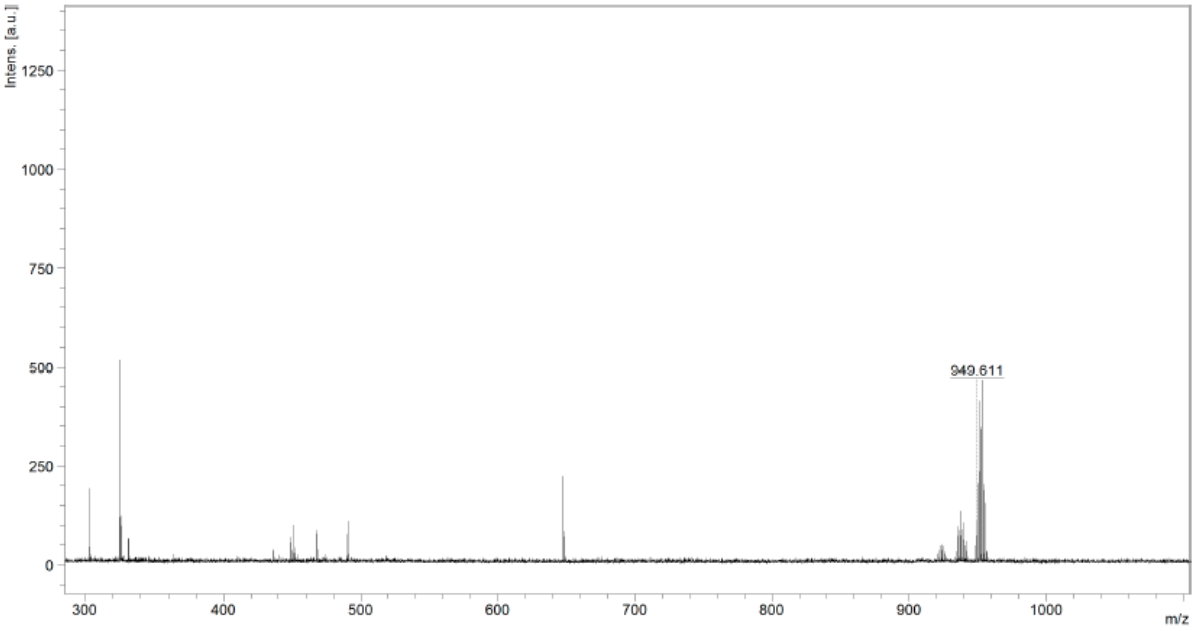
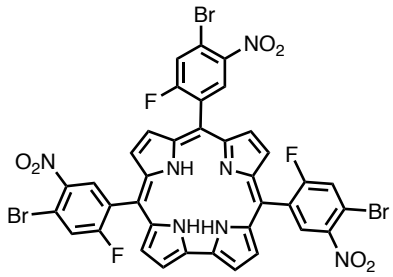



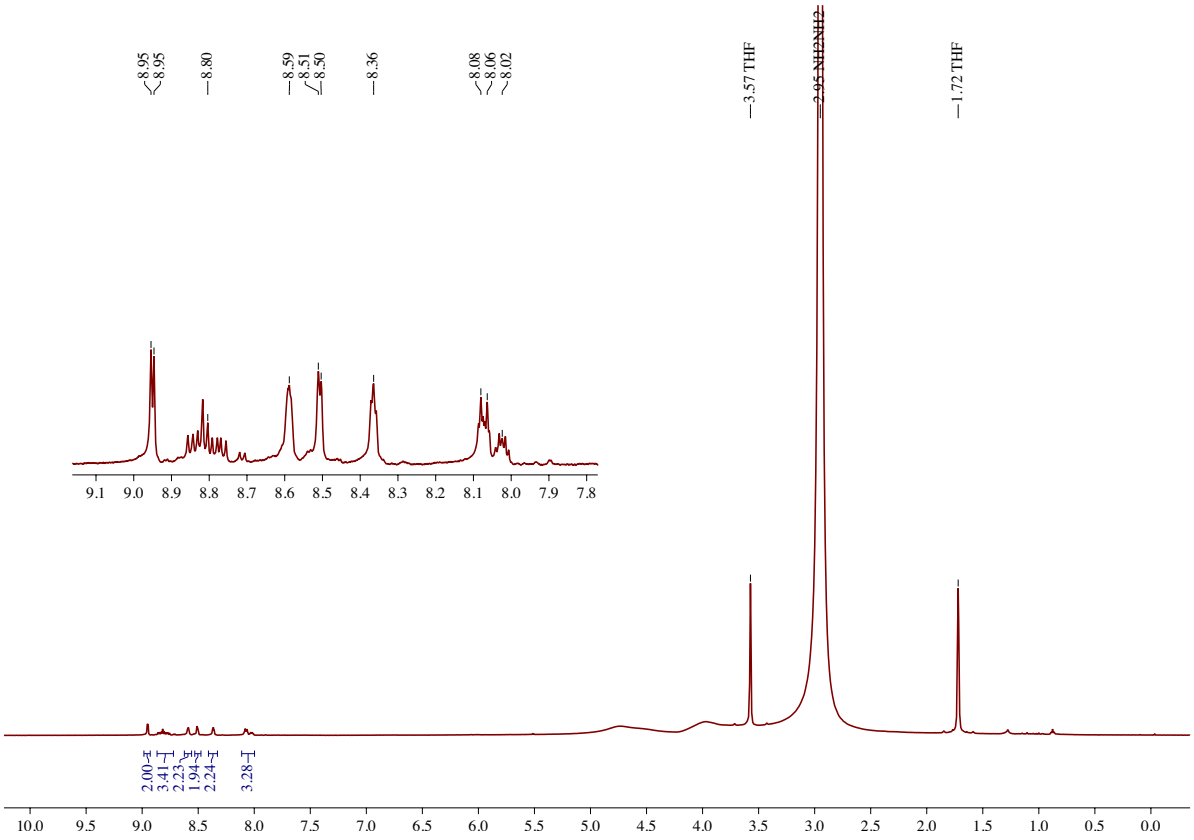

**Figure S48:** HPLC chromatogram of 5,10,15-tris(2',6'-difluoro-3'-nitrophenyl)corrole **10.**

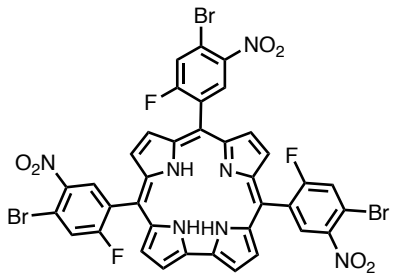



Chemical Formula: $C_{37}H_{17}Br_3F_3N_7O_6$
Exact Mass: 948.8743
Molecular Weight: 952.2932

**Figure S49:** MALDI/TOF LRMS of 5,10,15-tris(4'-bromo-2'-fluoro-5'-nitrophenyl)-corrole **11.**




Chemical Formula: $C_{37}H_{17}Br_3F_3N_7O_6$

Exact Mass: 948.8743

Molecular Weight: 952.2932

**Figure 50:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-bromo-2'-fluoro-5'-nitrophenyl)corrole **11.**

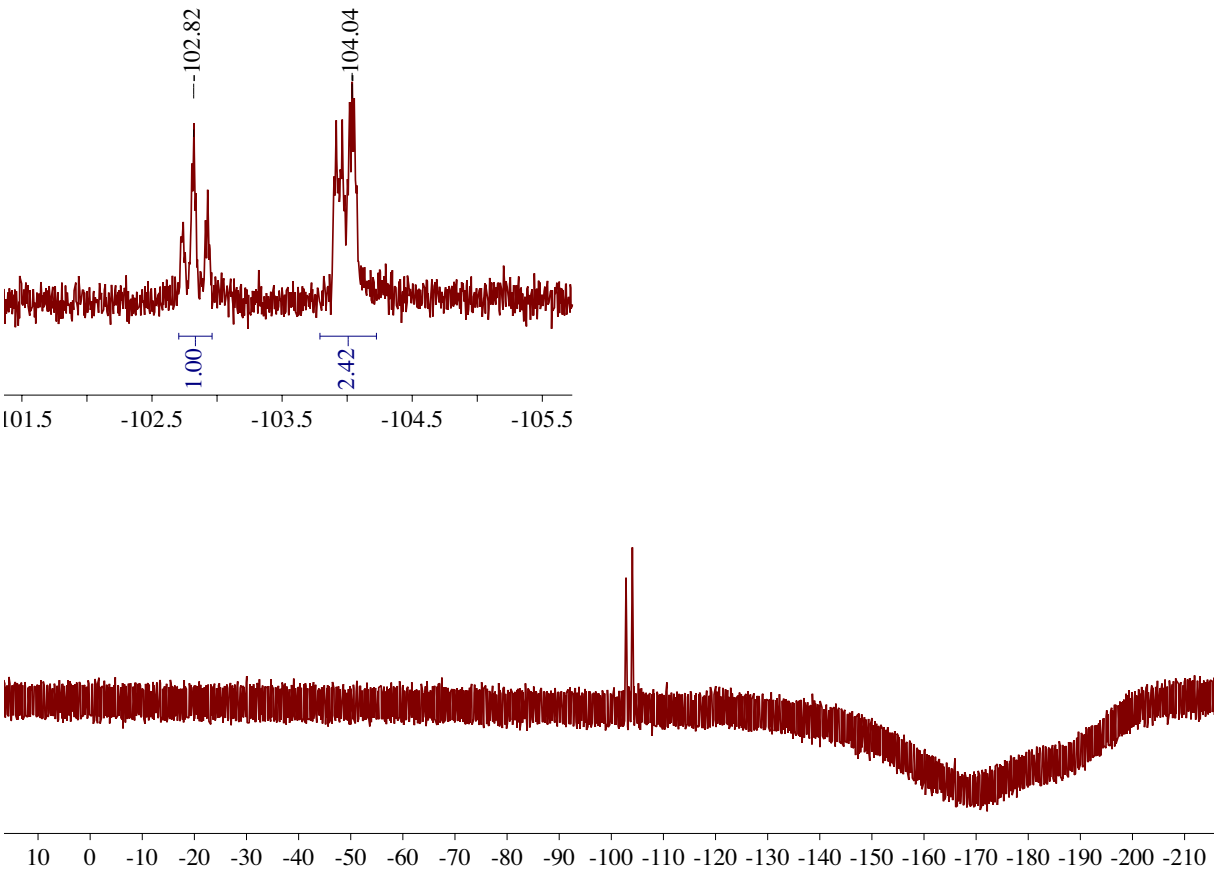


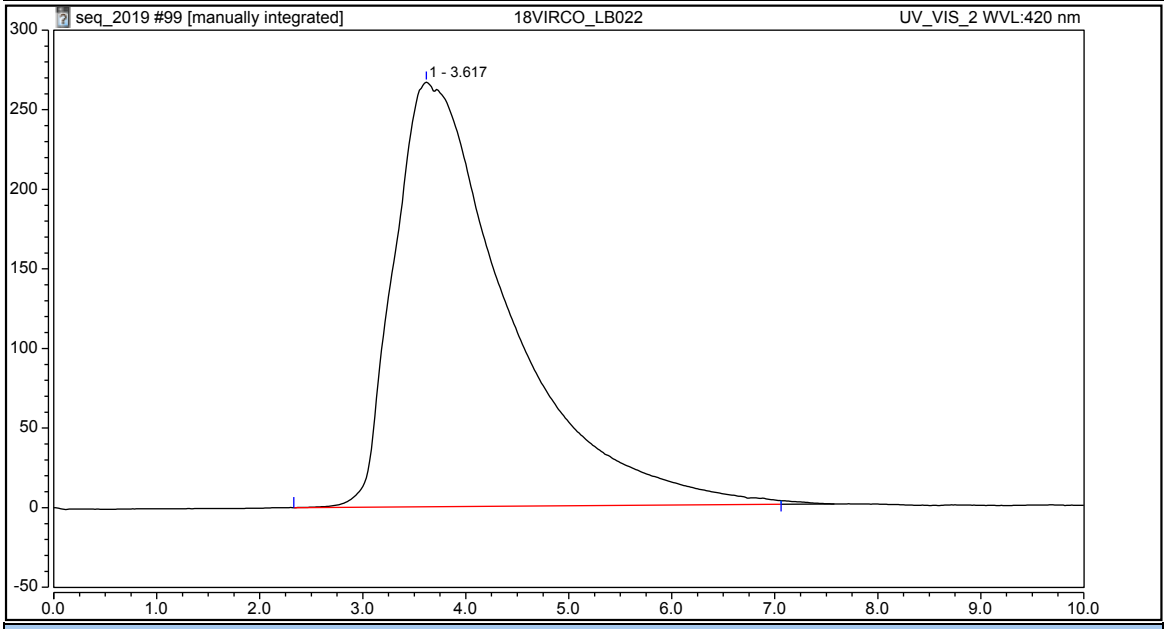

**Figure S51:** $^{19}$F NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(4'-bromo-2'-fluoro-5'-nitrophenyl)corrole **11.**

Chromatogram and Results

**Injection Details**

| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB022** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA4** | *Injection Volume:* | **5.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_10%** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **31/mai/19 11:25** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.617 | 344.809 | 266.721 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **344.809** | **266.721** | **100.00** | **100.00** | |

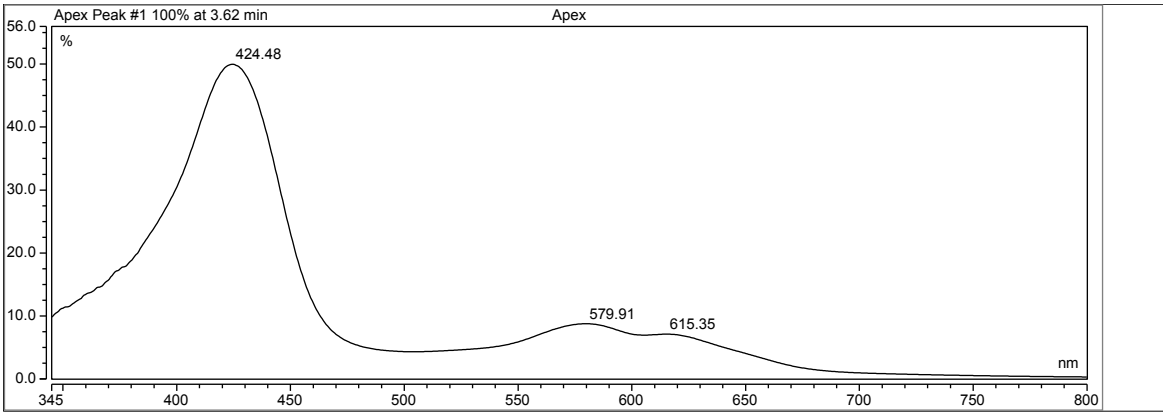
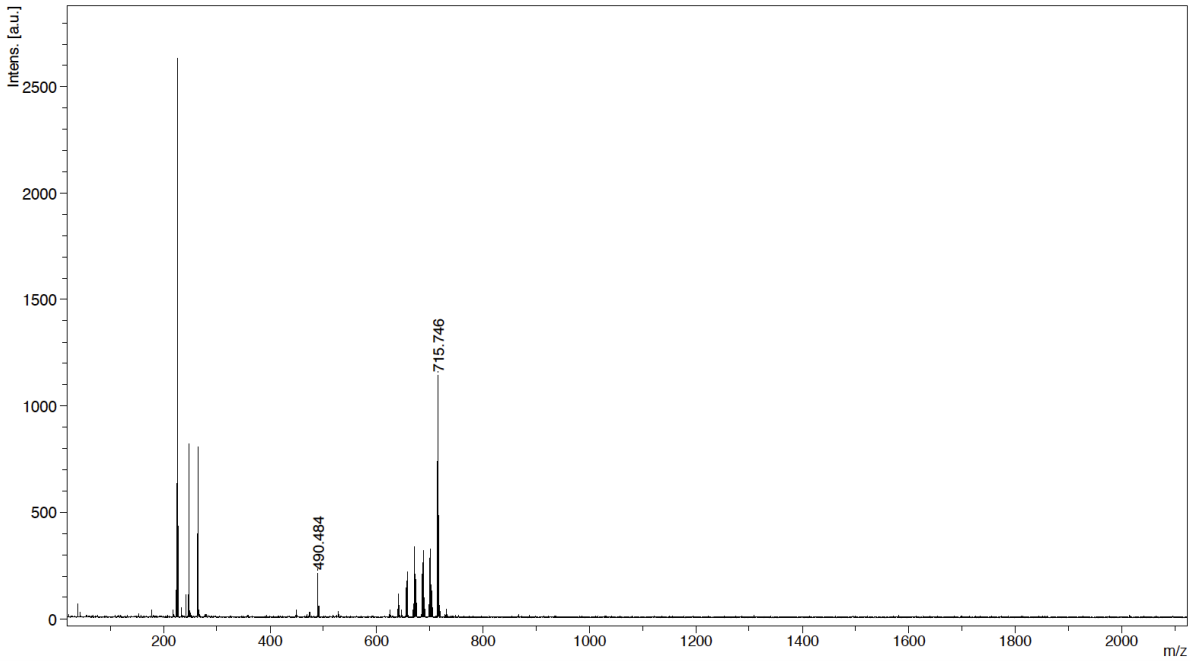
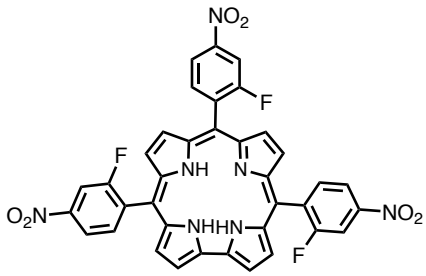



**Figure S52:** HPLC chromatogram of 5,10,15-tris(4'-bromo-2'-fluoro-5'-nitrophenyl)-corrole **11.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure 53:** MALDI/TOF LRMS of 5,10,15-tris(2'-fluoro-4'-nitrophenyl)corrole **12.**

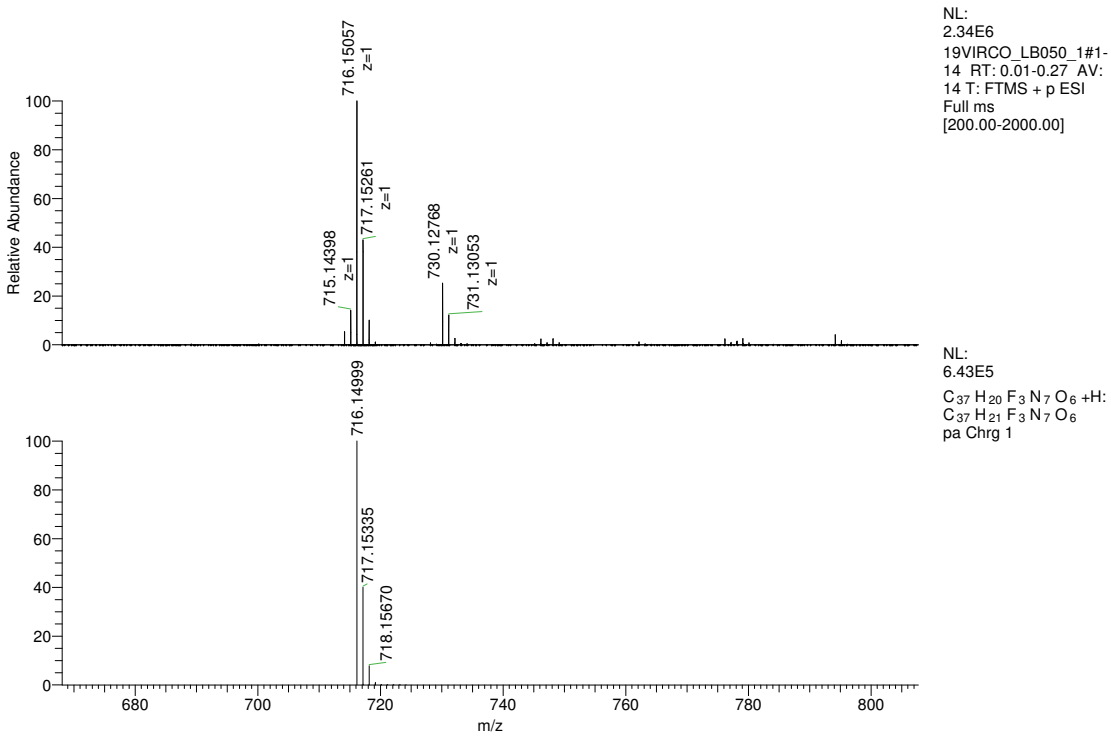
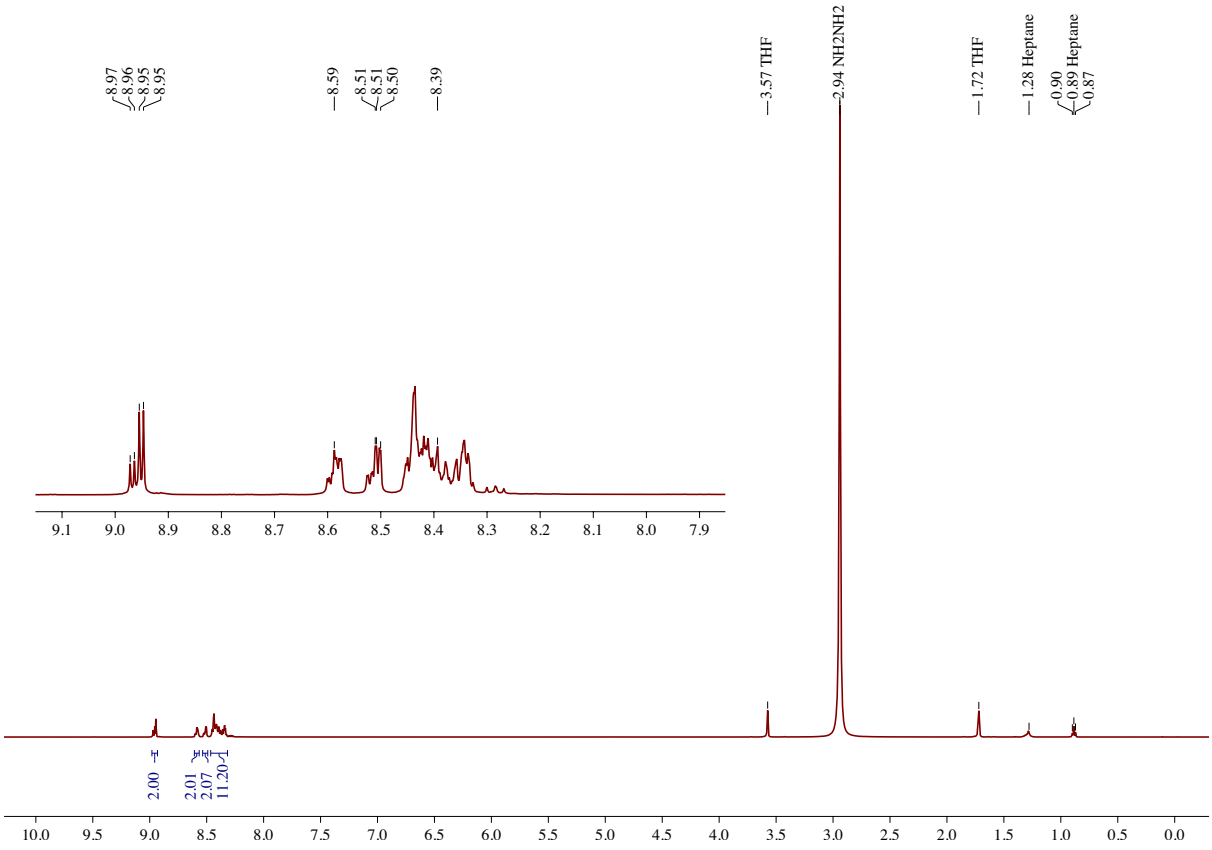
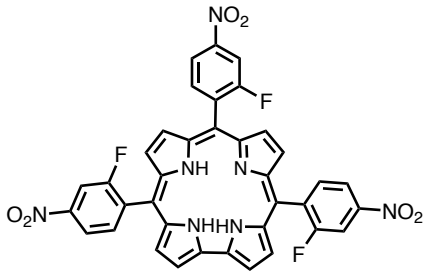


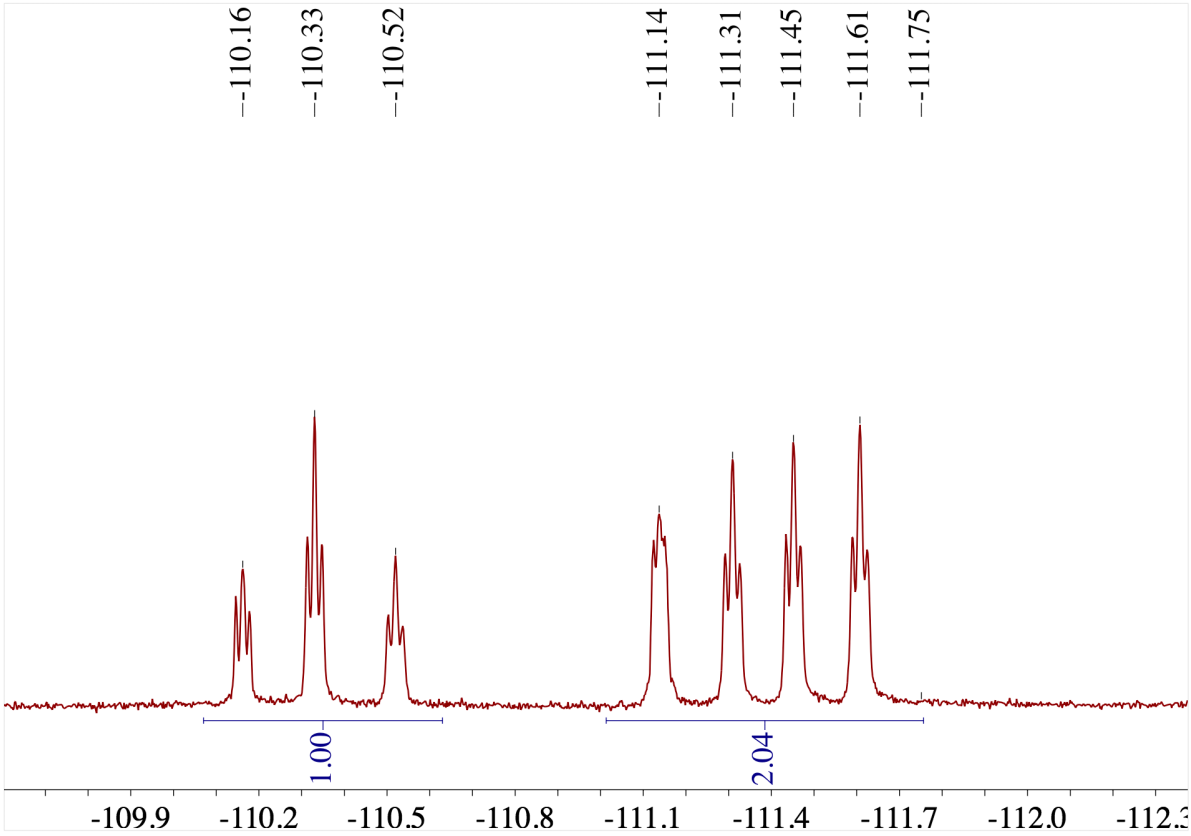

**Figure S54:** ESI HRMS of 5,10,15-tris(2'-fluoro-4'-nitrophenyl)corrole **12.**

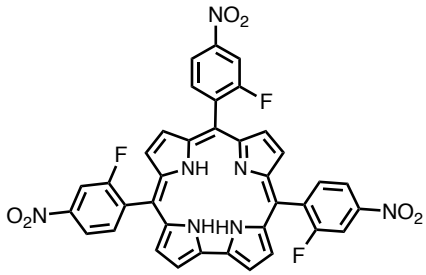



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S55:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-4'-nitrophenyl)corrole **12.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

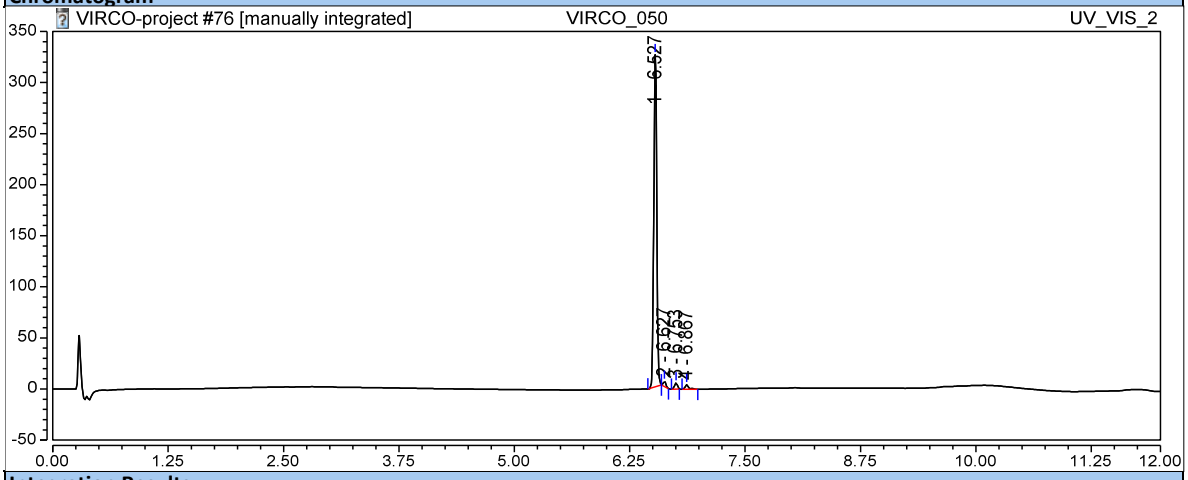
**Figure S56:** $^{19}$F NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(2'-fluoro-4'-nitrophenyl)corrole **12.**

## Chromatogram and Results

**Injection Details**

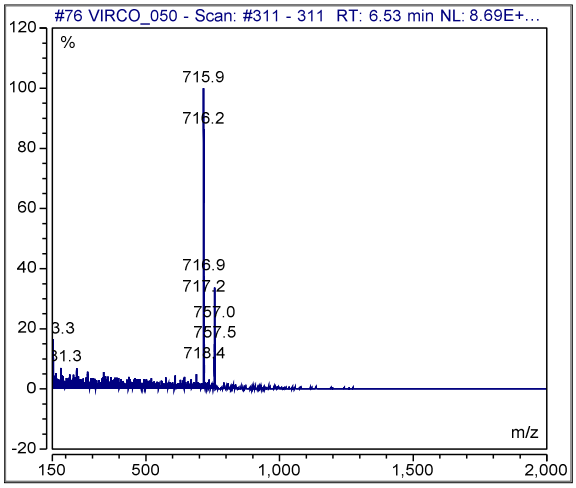
| | | | |
|---|---|---|---|
| *Injection Name:* | **VIRCO_050** | *Run Time (min):* | **12.00** |
| *Vial Number:* | **GD1** | *Injection Volume:* | **10.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **400.0** |
| *Instrument Method:* | **Corroles-LB-Kinetex** | *Bandwidth:* | **4** |
| *Processing Method:* | **no integration** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **10/Sep/18 11:09** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 6.527 | 12.115 | 325.099 | 95.31 | 95.43 | n.a. |
| 2 | | 6.627 | 0.169 | 5.037 | 1.33 | 1.48 | n.a. |
| 3 | | 6.753 | 0.225 | 6.057 | 1.77 | 1.78 | n.a. |
| 4 | | 6.867 | 0.202 | 4.459 | 1.59 | 1.31 | n.a. |
| **Total:** | | | **12.711** | **340.653** | **100.00** | **100.00** | |



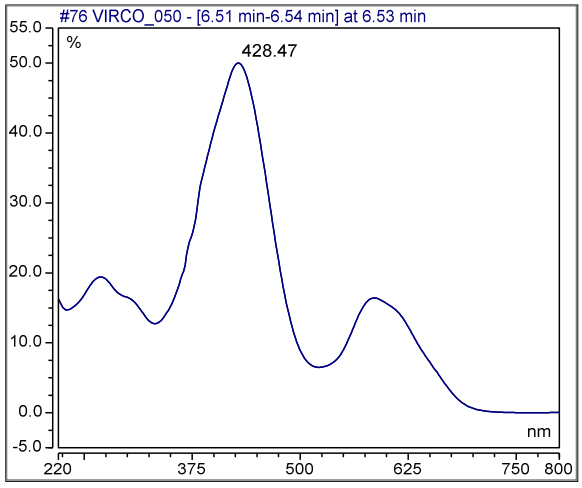
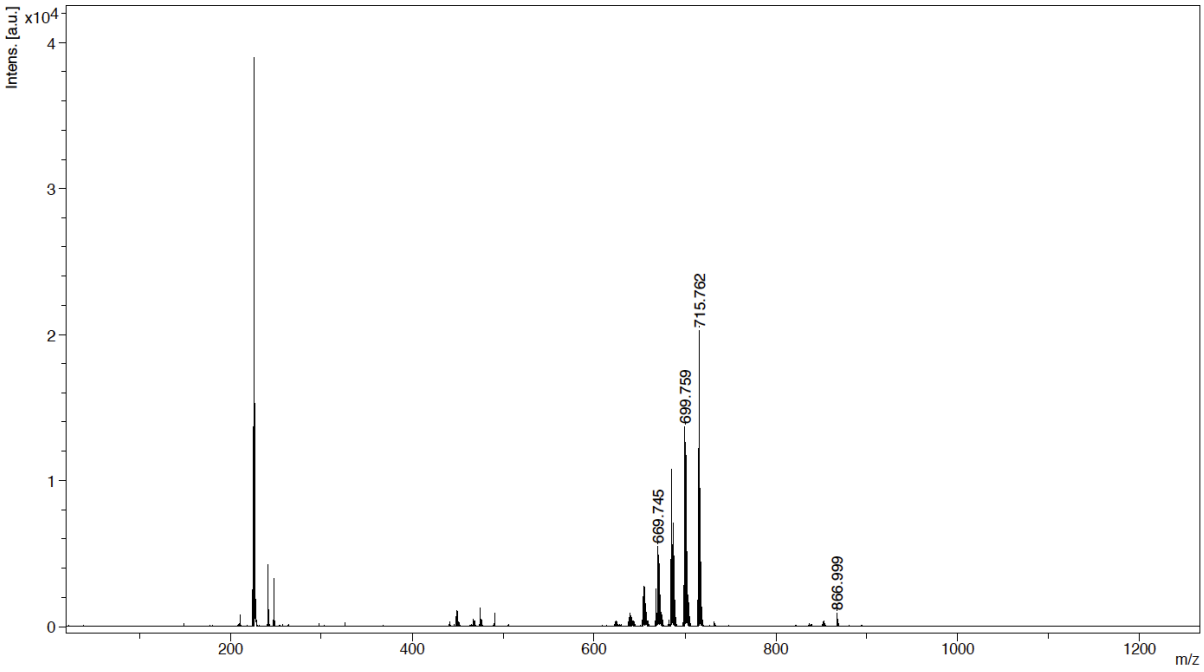
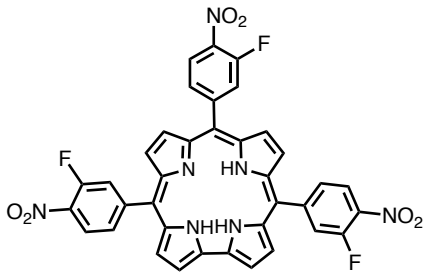




**Figure S57:** HPLC chromatogram of 5,10,15-tris(2'-fluoro-4'-nitrophenyl)corrole **12.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S58:** MALDI/TOF LRMS of 5,10,15-tris(3'-fluoro-4'-nitrophenyl)corrole **13.**

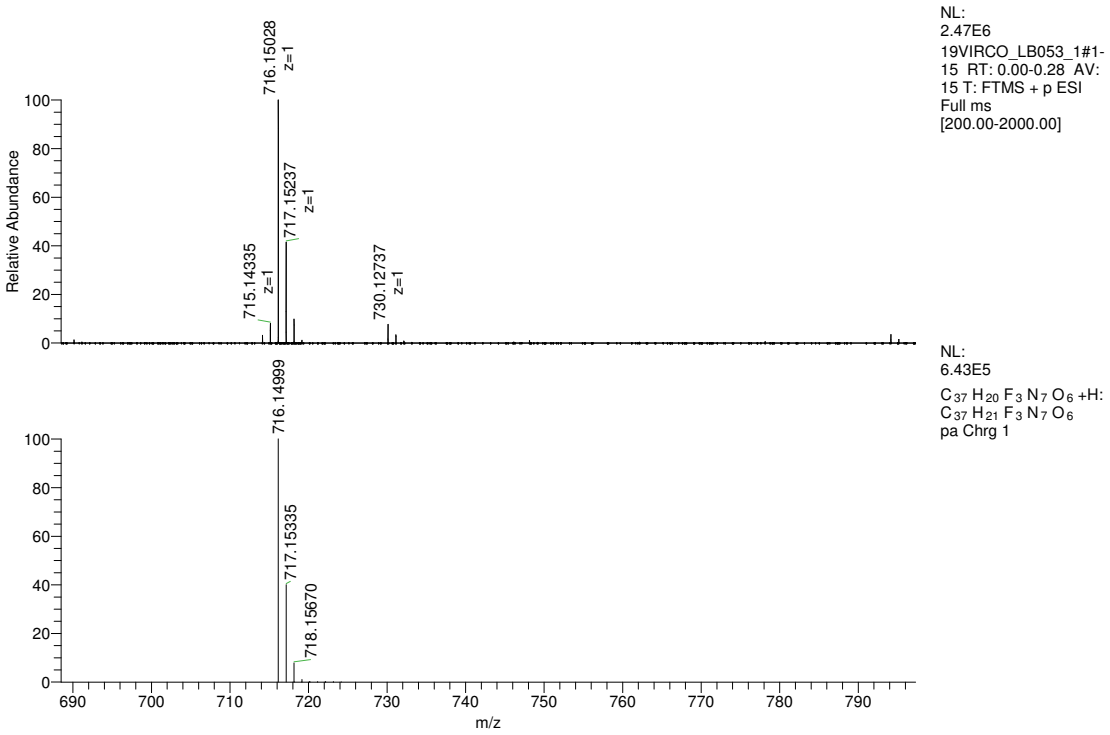
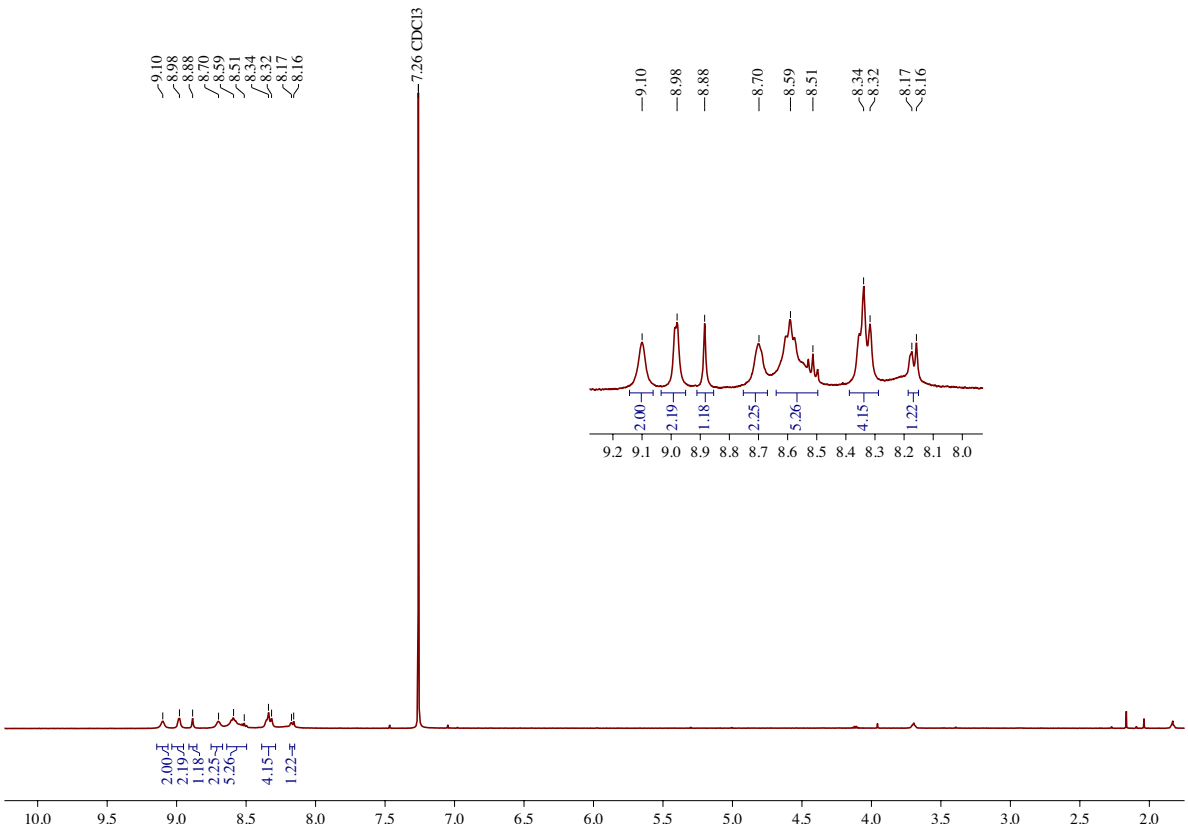
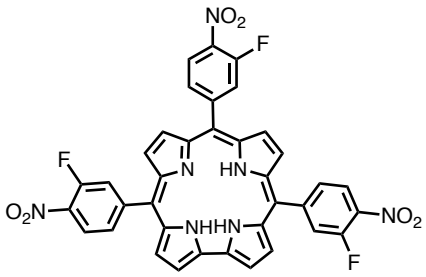



**Figure S59:** ESI HRMS of 5,10,15-tris(3'-fluoro-4'-nitrophenyl)corrole **13.**



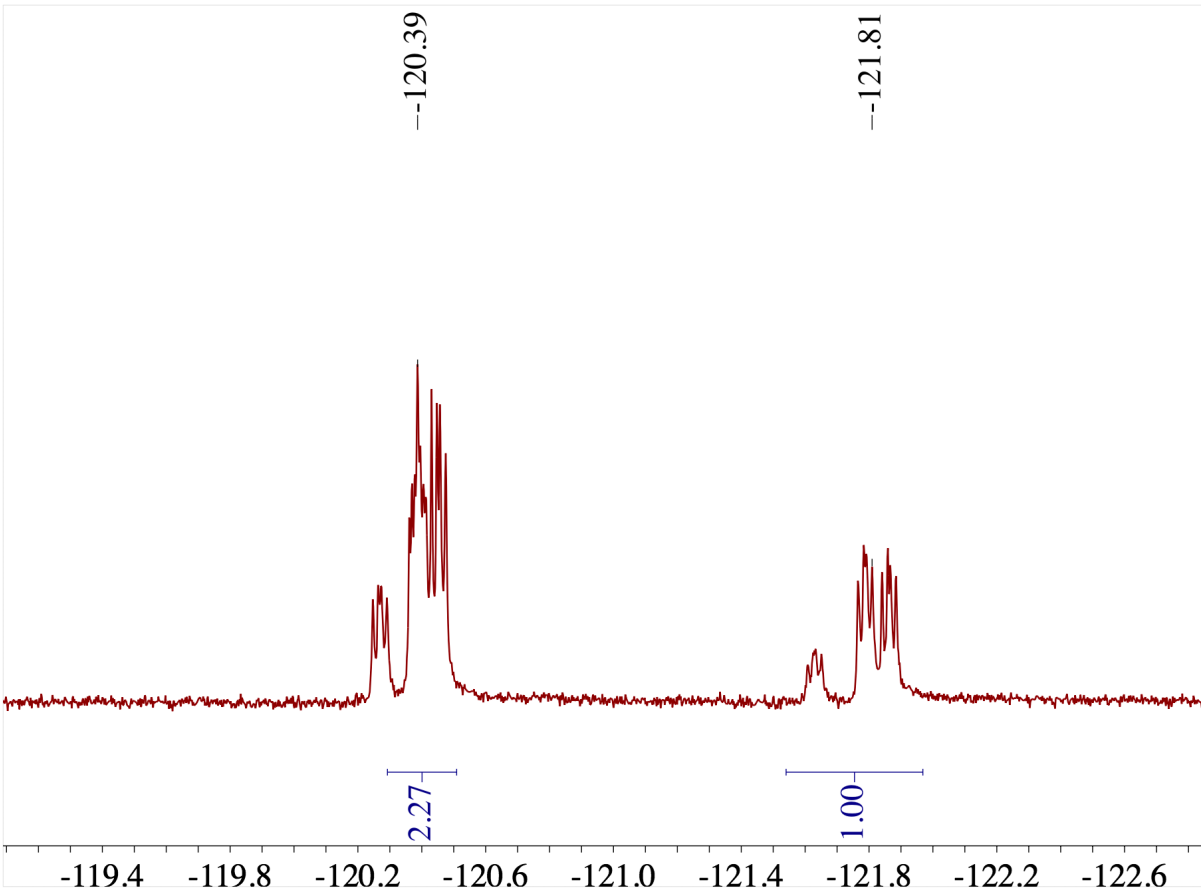



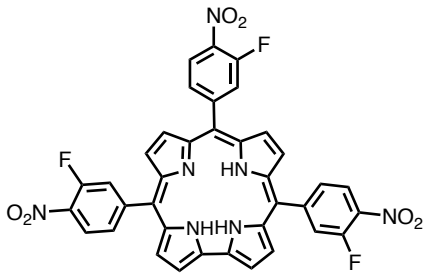

Chemical Formula: $C_{37}H_{20}F_3N_7O_6$

Exact Mass: 715.1427

Molecular Weight: 715.6052

**Figure S60:** $^1$H NMR spectrum (500 MHz, $CDCl_3$) of 5,10,15-tris(3'-fluoro-4'-nitrophenyl)corrole **13.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

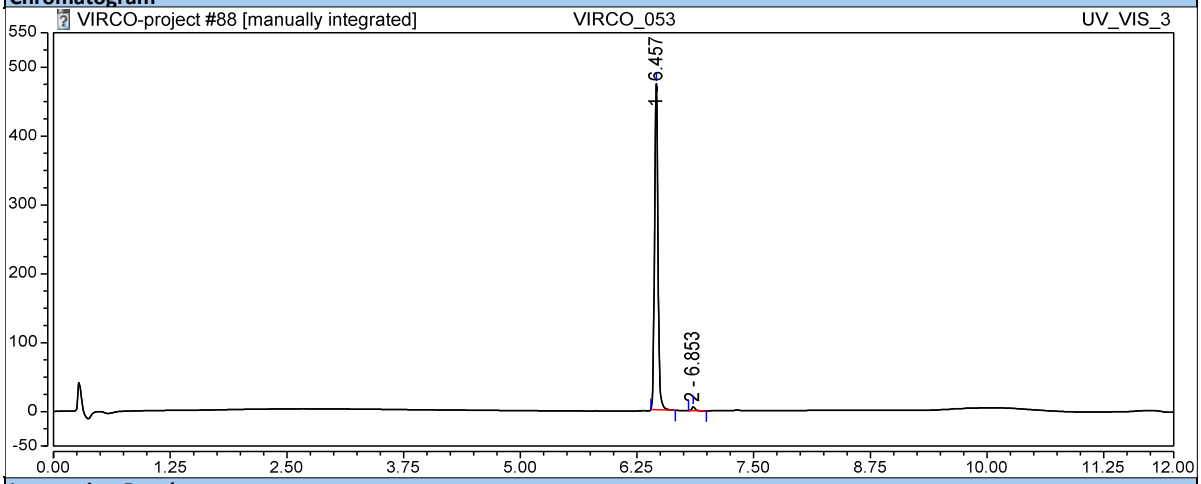
**Figure S61:** $^{19}F$ NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,10,15-tris(3'-fluoro-4'-nitrophenyl)corrole **13.**

## Chromatogram and Results

**Injection Details**

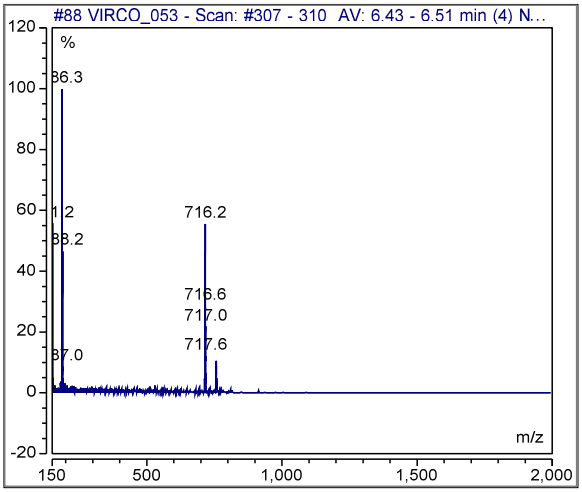
| | | | |
|---|---|---|---|
| *Injection Name:* | **VIRCO_053** | *Run Time (min):* | **12.00** |
| *Vial Number:* | **GC5** | *Injection Volume:* | **10.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_3** |
| *Calibration Level:* | | *Wavelength:* | **440** |
| *Instrument Method:* | **Corroles-LB-Kinetex** | *Bandwidth:* | **4** |
| *Processing Method:* | **no integration** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **24/Sep/18 14:30** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 6.457 | 20.049 | 473.201 | 98.93 | 98.78 | n.a. |
| 2 | | 6.853 | 0.217 | 5.850 | 1.07 | 1.22 | n.a. |
| **Total:** | | | **20.266** | **479.052** | **100.00** | **100.00** | |



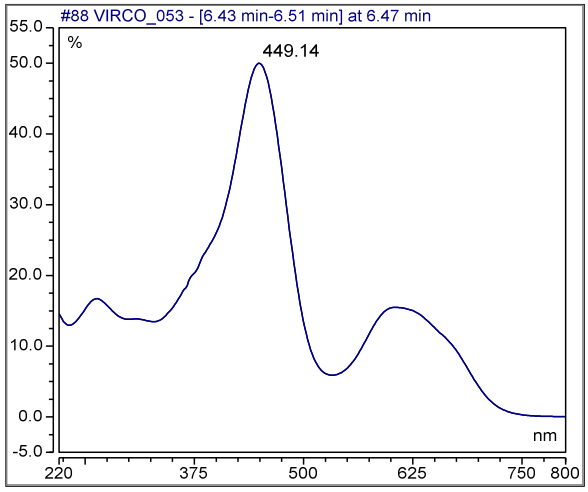
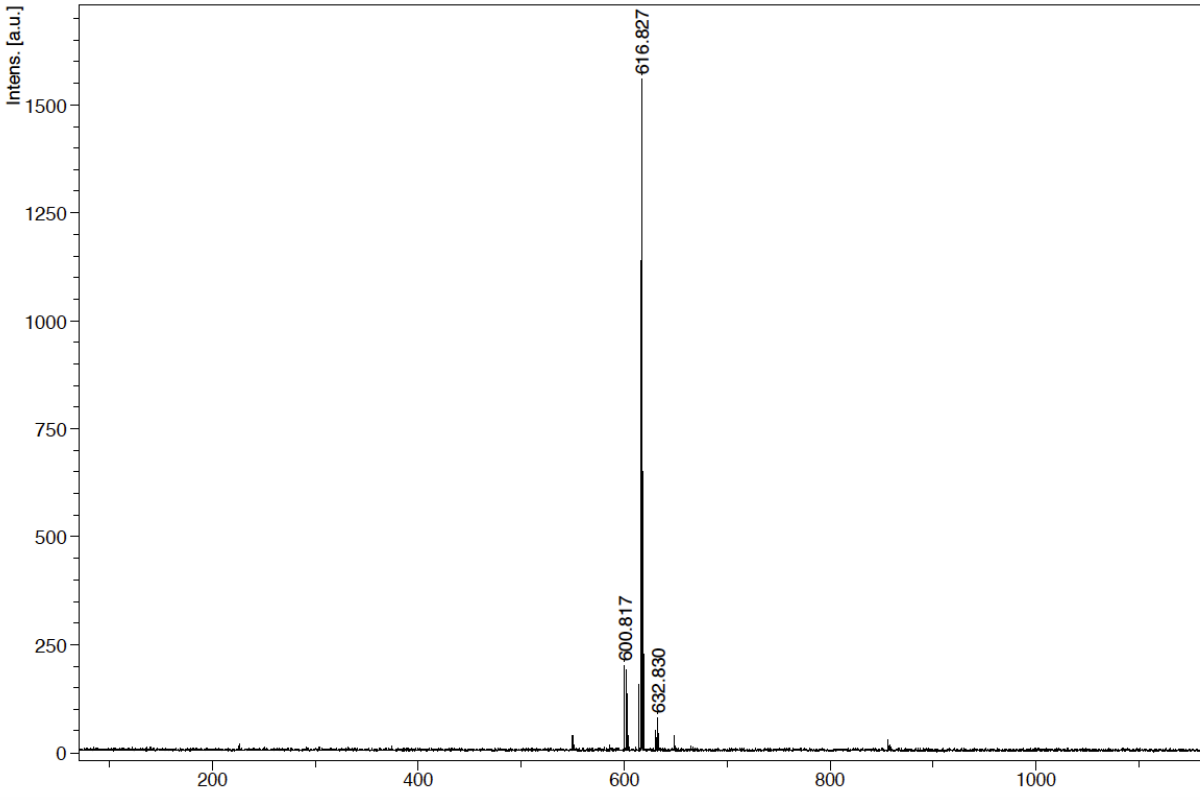
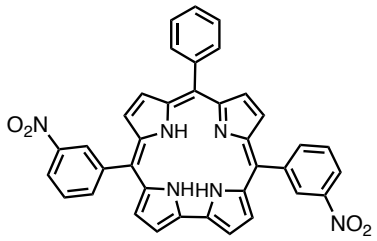



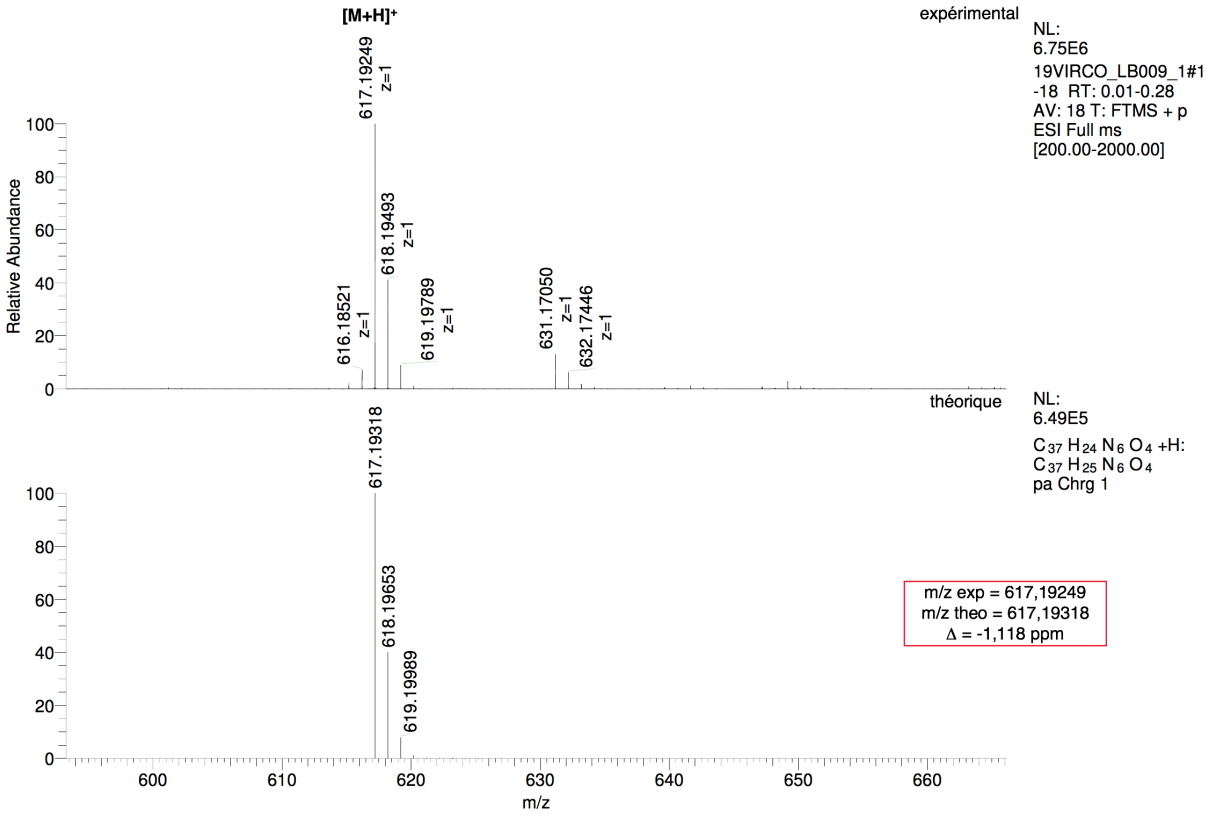

**Figure 62:** HPLC chromatogram of 5,10,15-tris(3'-fluoro-4'-nitrophenyl)corrole **13.**

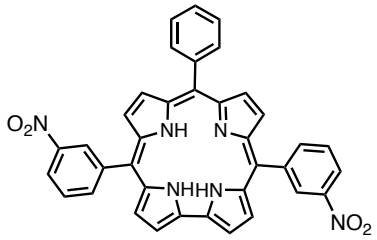



Chemical Formula: $C_{37}H_{24}N_6O_4$
Exact Mass: 616.1859
Molecular Weight: 616.6370

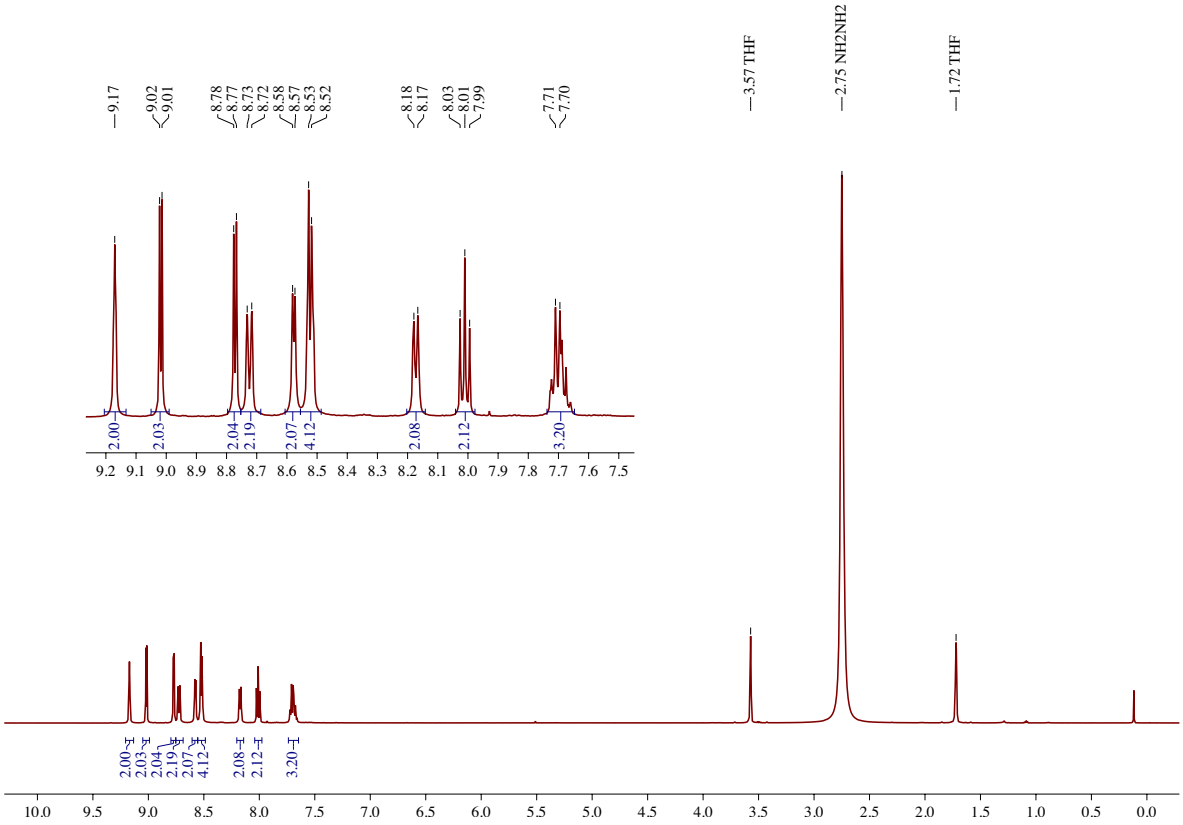
**Figure S63:** MALDI/TOF LRMS of 5,15-bis(3'-nitrophenyl)-10-(phenyl)corrole **14.**

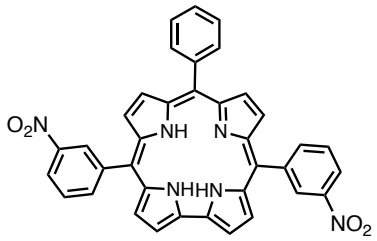



Chemical Formula $[M+H]^+$: $C_{37}H_{25}N_6O_4$
Exact Mass: 617.19318
Experimental: 617.19249
δ (ppm) = 1.12

**Figure S64:** ESI HRMS of 5,15-bis(3'-nitrophenyl)-10-(phenyl)corrole **14.**




Chemical Formula: $C_{37}H_{24}N_6O_4$
Exact Mass: 616.1859
Molecular Weight: 616.6370

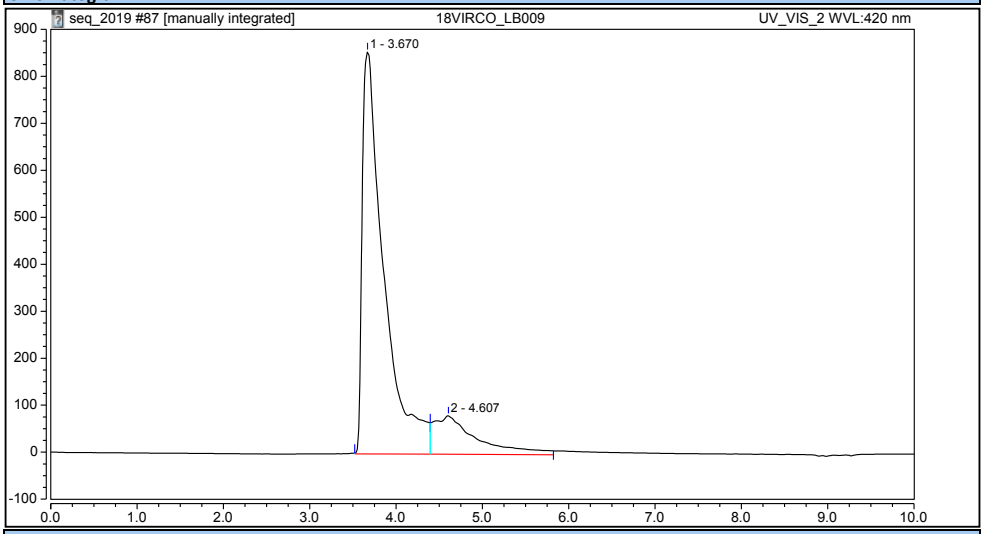
**Figure S65:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(3'-nitrophenyl)-10-(phenyl)corrole **14.**

Chromatogram and Results

**Injection Details**

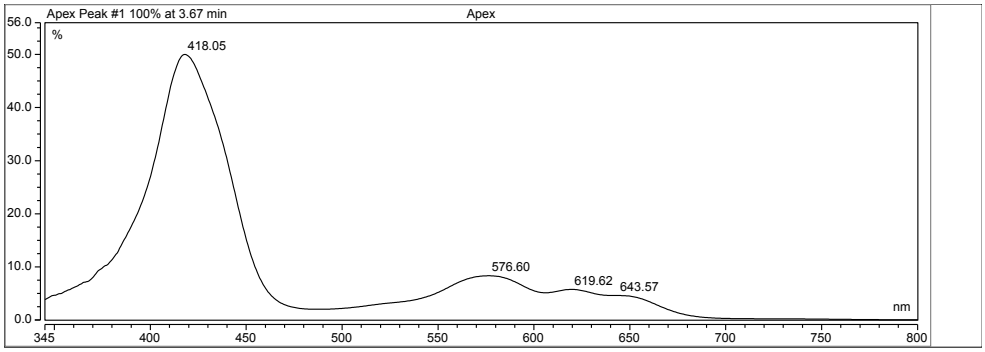
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB009** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA5** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 19:20** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.670 | 246.640 | 855.751 | 83.89 | 91.26 | n.a. |
| 2 | | 4.607 | 47.375 | 81.952 | 16.11 | 8.74 | n.a. |
| **Total:** | | | **294.015** | **937.703** | **100.00** | **100.00** | |



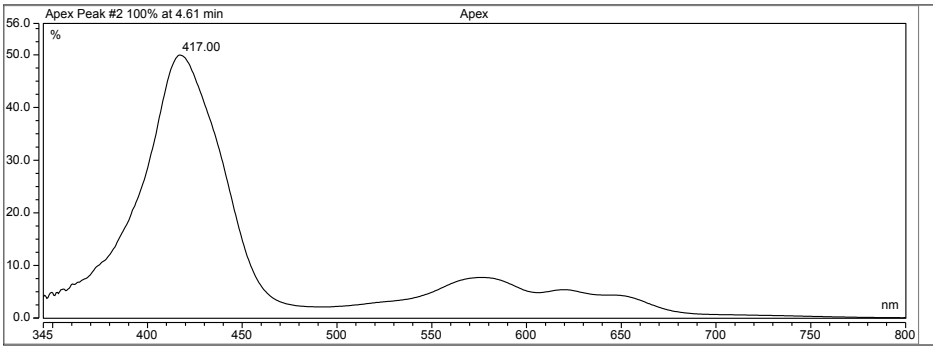
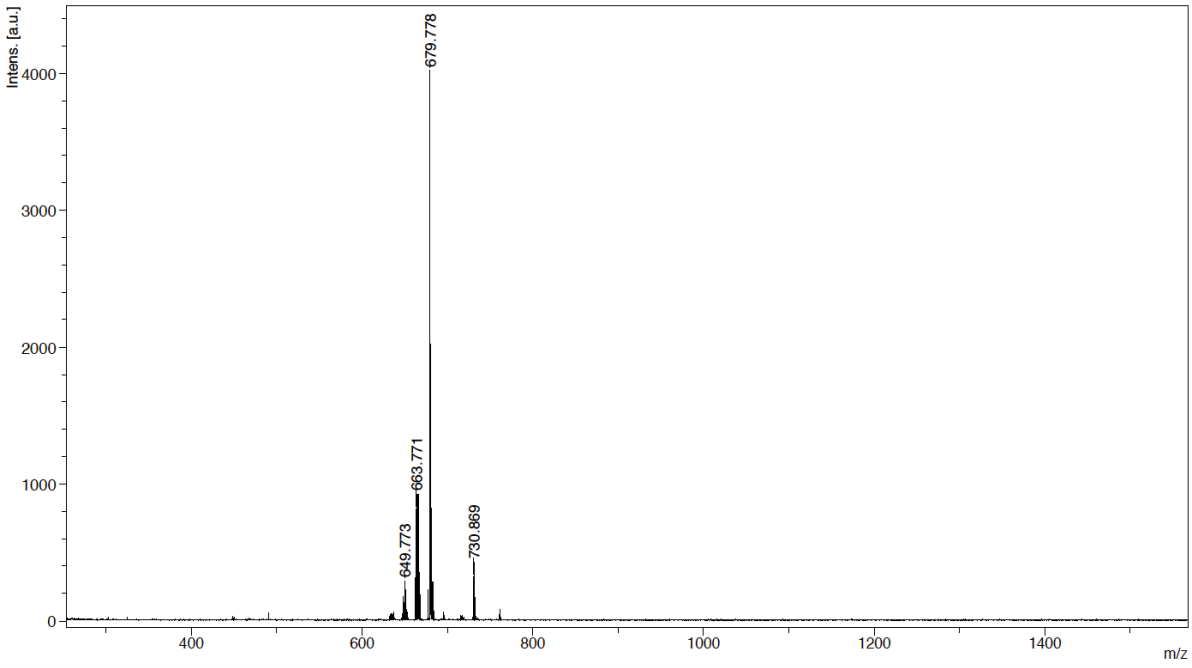
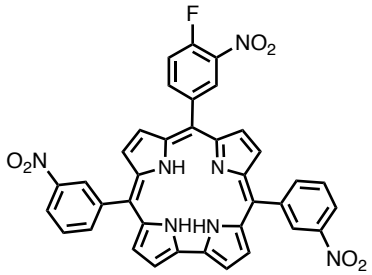



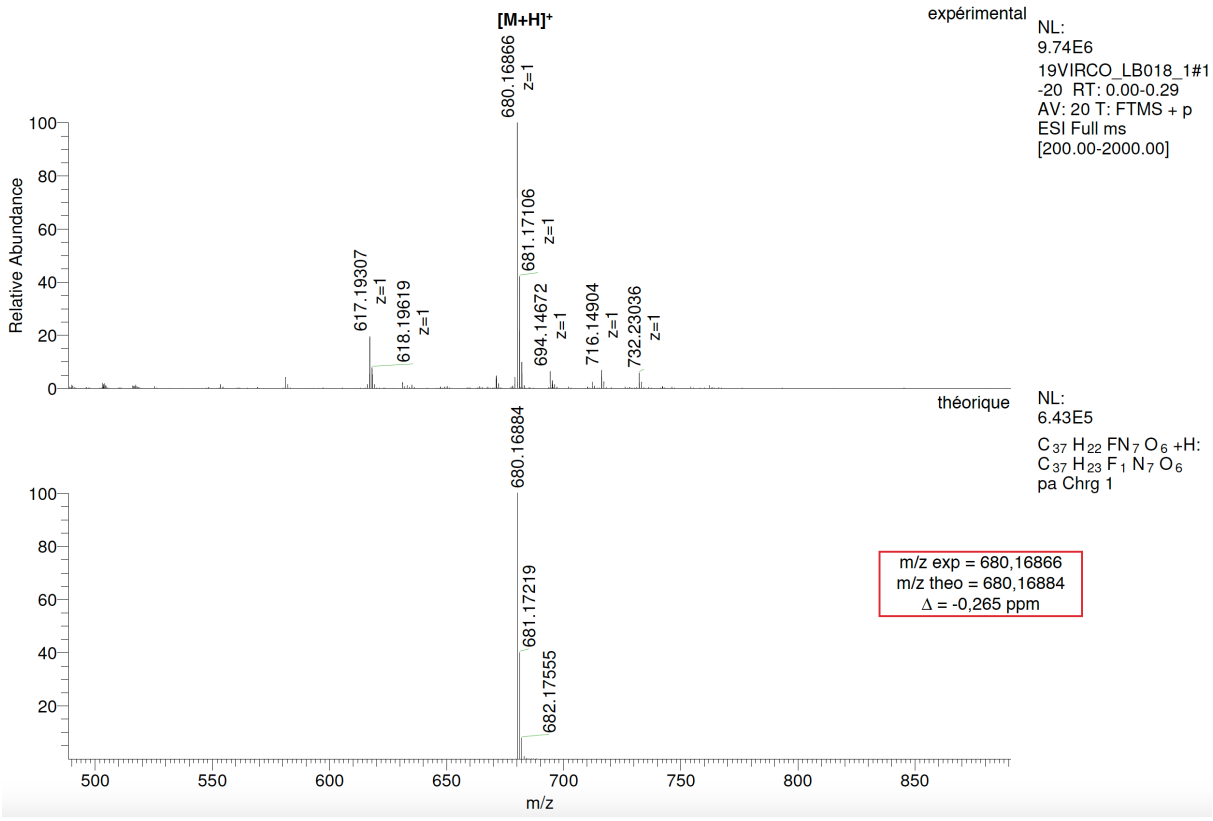

**Figure S66:** HPLC chromatogram of 5,15-bis(3'-nitrophenyl)-10-(phenyl)corrole **14.**

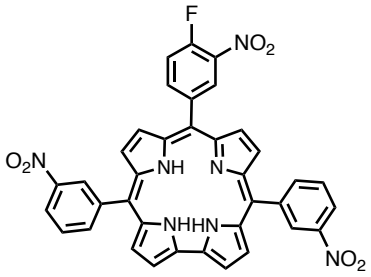



Chemical Formula: $C_{37}H_{22}FN_7O_6$
Exact Mass: 679.1616
Molecular Weight: 679.6244

**Figure S67:** MALDI/TOF LRMS of 5,15-bis(3'-nitrophenyl)-10-(4'-fluoro-3'-nitrophenyl)corrole **15.**




Chemical Formula $[M+H]^+$: $C_{37}H_{23}FN_7O_6$

Exact Mass: 680.16884

Experimental: 680.16866

δ (ppm) = 0.26

**Figure S68:** ESI HRMS of 5,15-bis(3'-nitrophenyl)-10-(4'-fluoro-3'-nitrophenyl)corrole **15.**

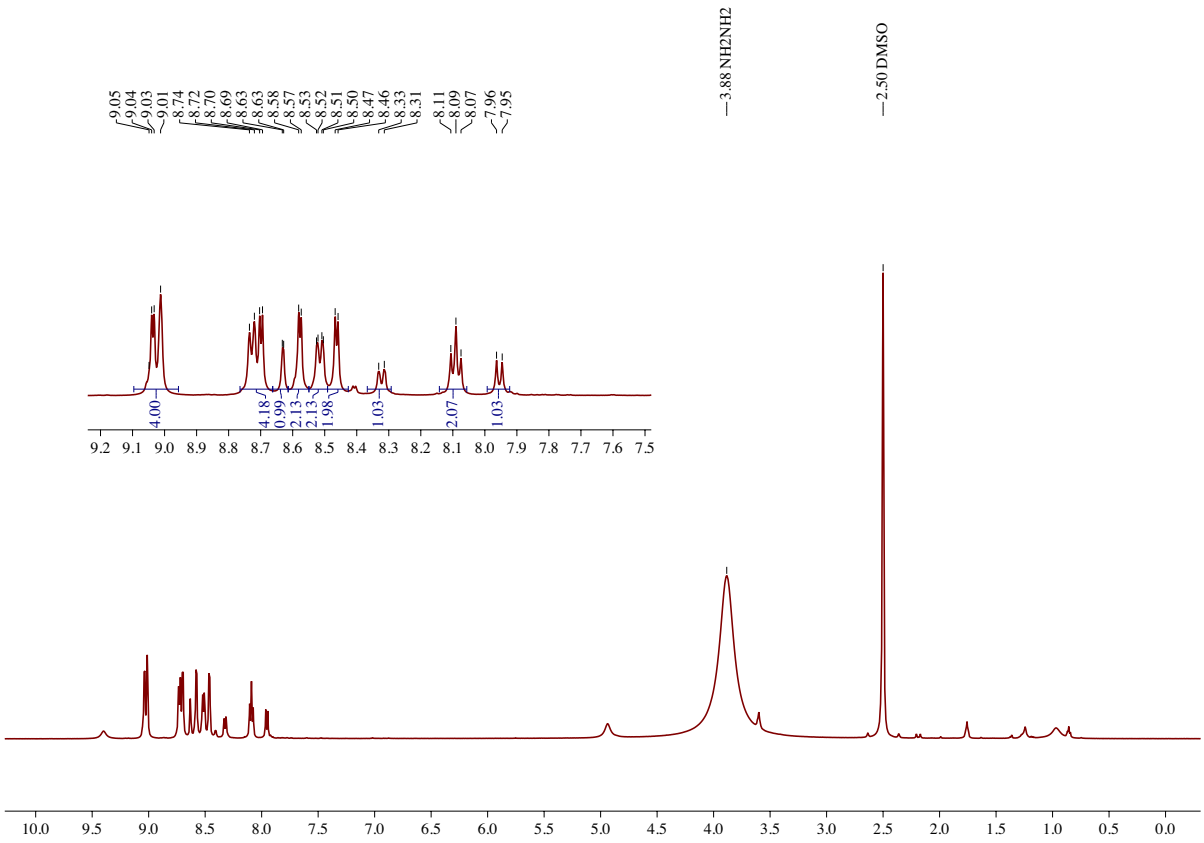



**Figure S69:** [1]H NMR spectrum (500 MHz, DMSO-$d_{6i}$ + one drop of hydrazine 64%) of 5,15-bis(3'-nitrophenyl)-10-(4'-fluoro-3'-nitrophenyl)corrole **15.**

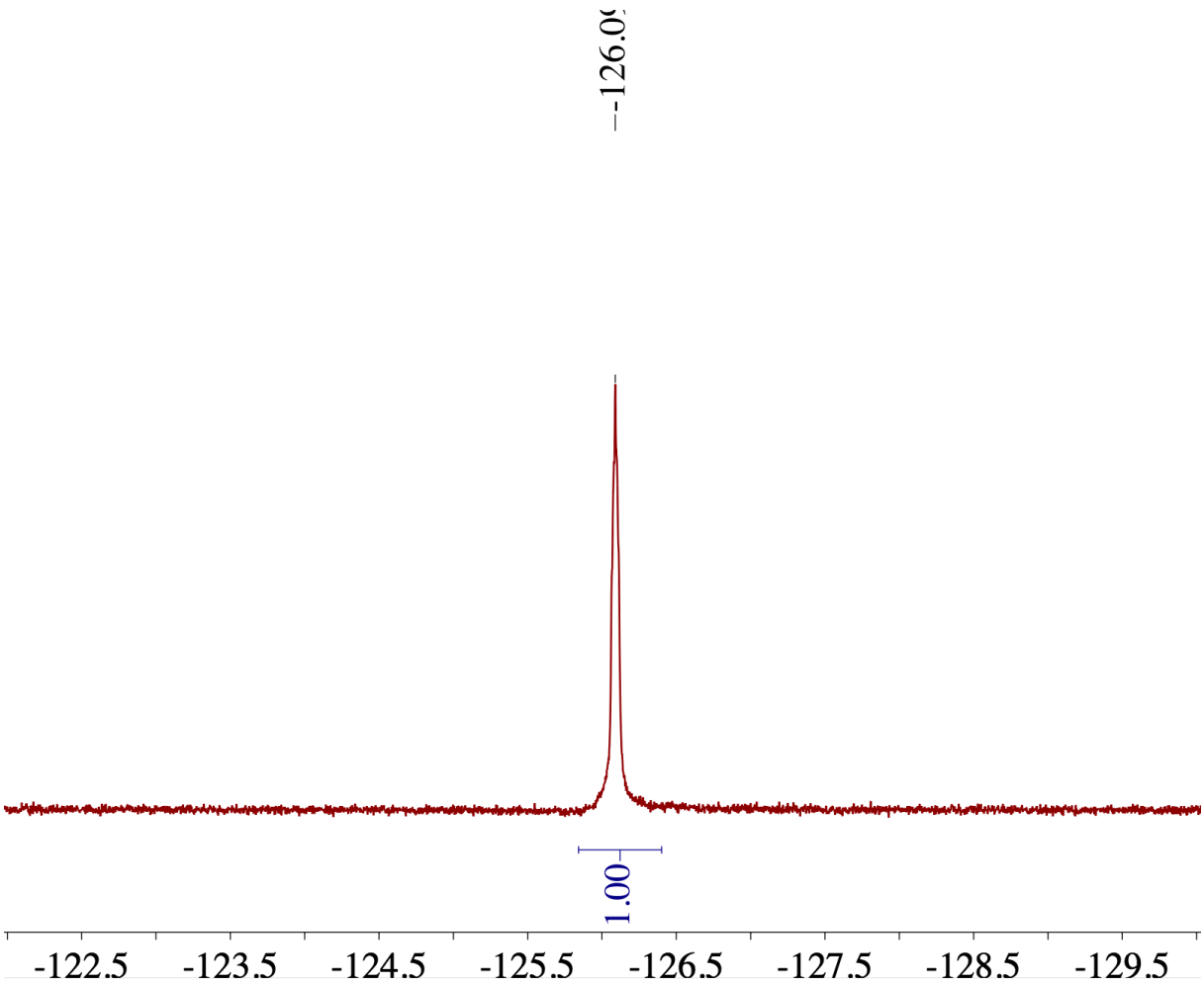


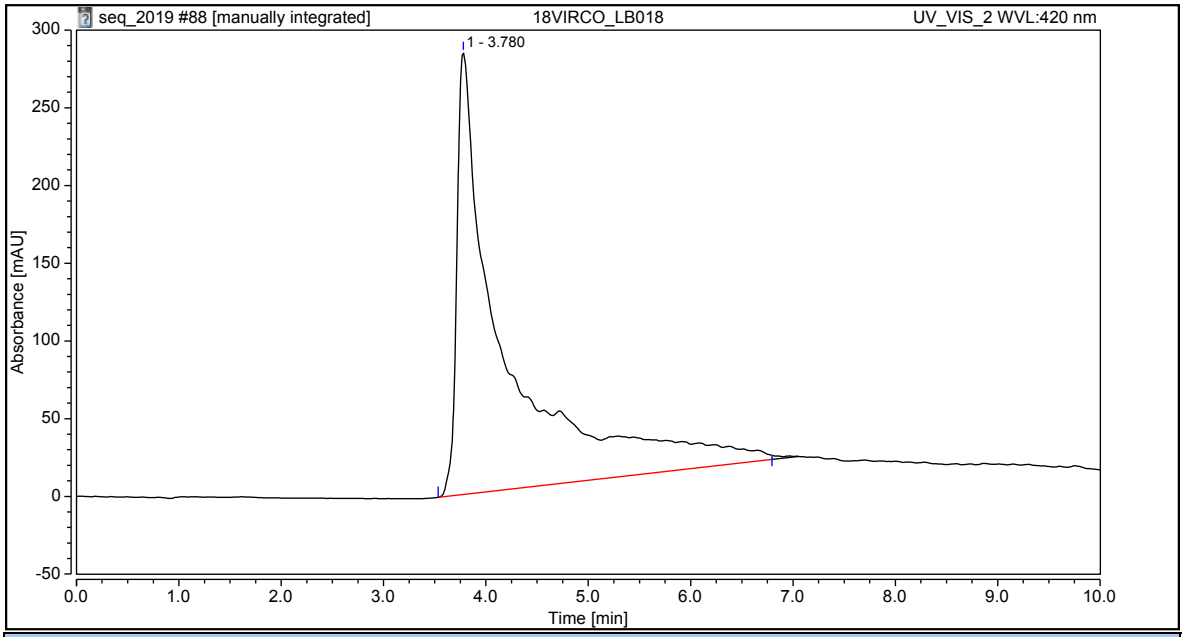

**Figure S70:** $^{19}$F NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(3'-nitrophenyl)-10-(4'-fluoro-3'-nitrophenyl)corrole **15.**

Chromatogram and Results

**Injection Details**

| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB018** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA6** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 19:31** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.780 | 155.081 | 284.284 | 100.00 | 100.00 | n.a. |
| **Total:** | | | **155.081** | **284.284** | **100.00** | **100.00** | |

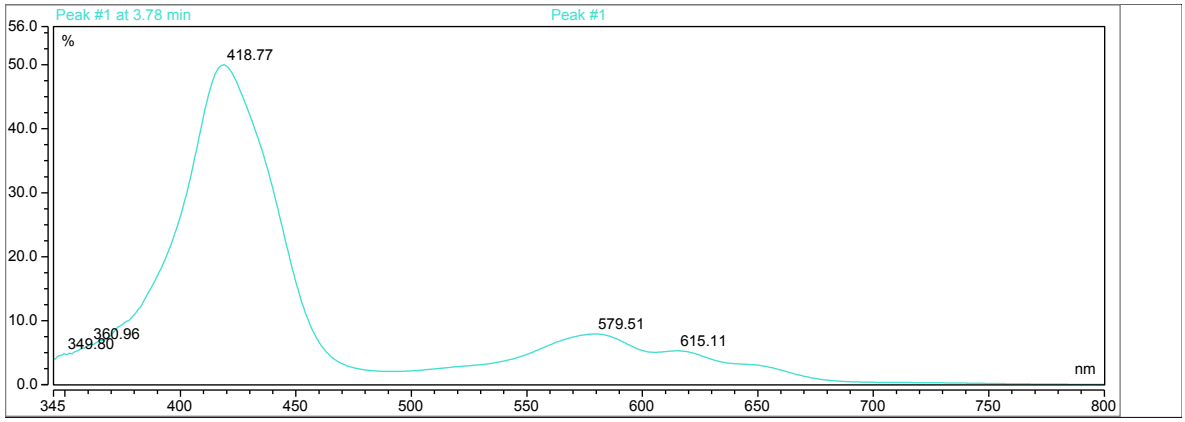
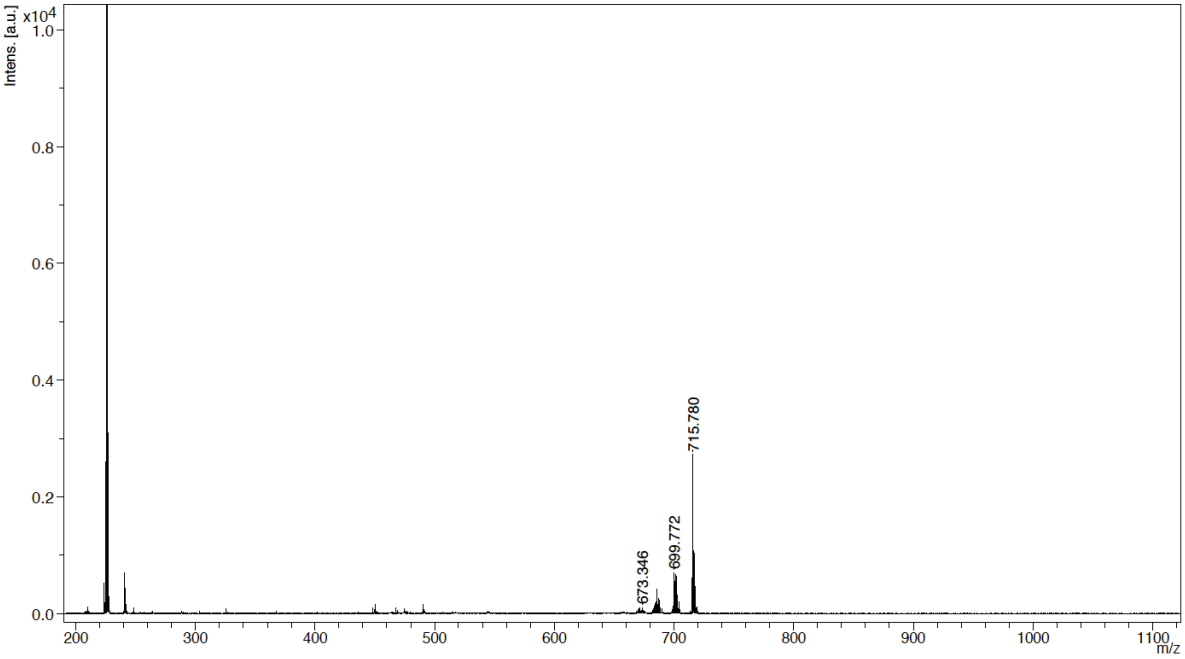
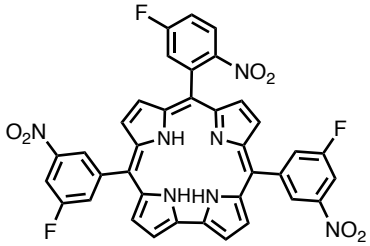


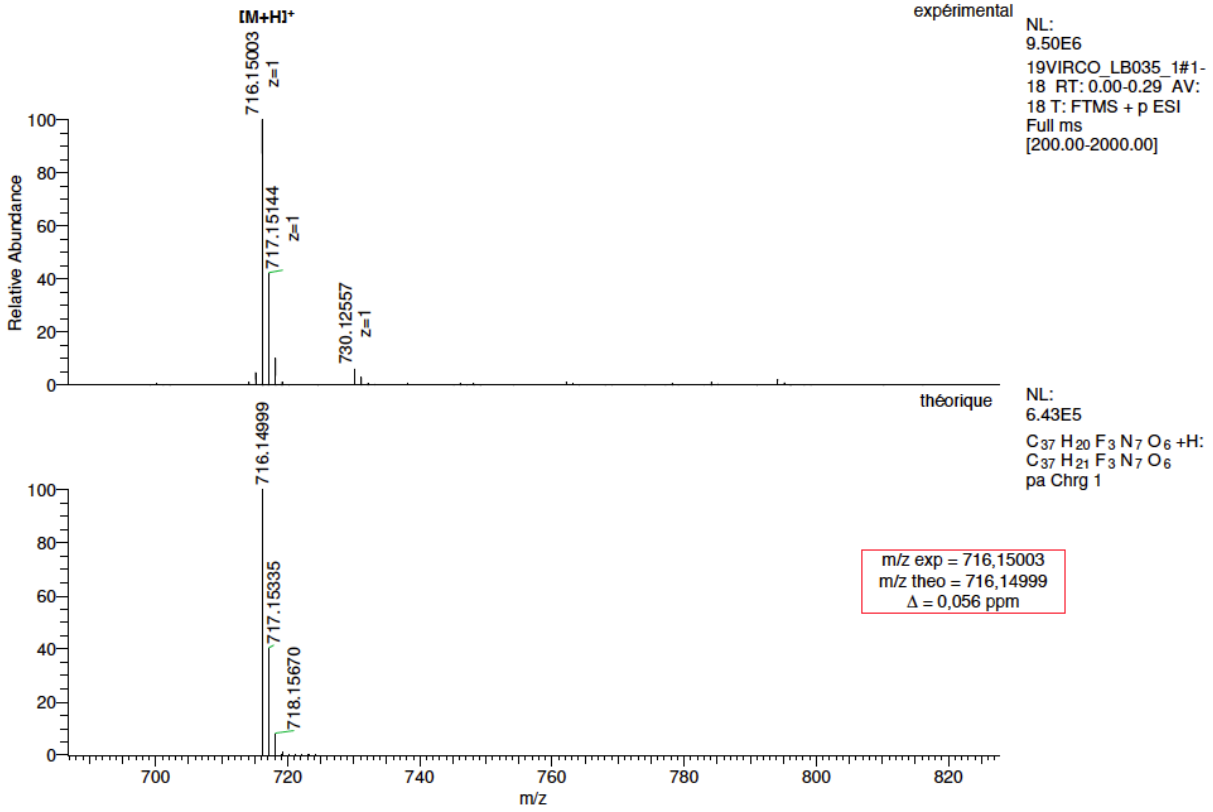

**Figure S71:** HPLC chromatogram of 5,15-bis(3'-nitrophenyl)-10-(4'-fluoro-3'-nitrophenyl)corrole **15.**

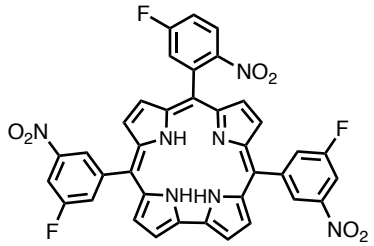



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure 72:** MALDI/TOF LRMS of 5,15-bis(3'-fluoro-5'-nitrophenyl)-10-(5'-fluoro-2'-nitrophenyl)corrole **16.**



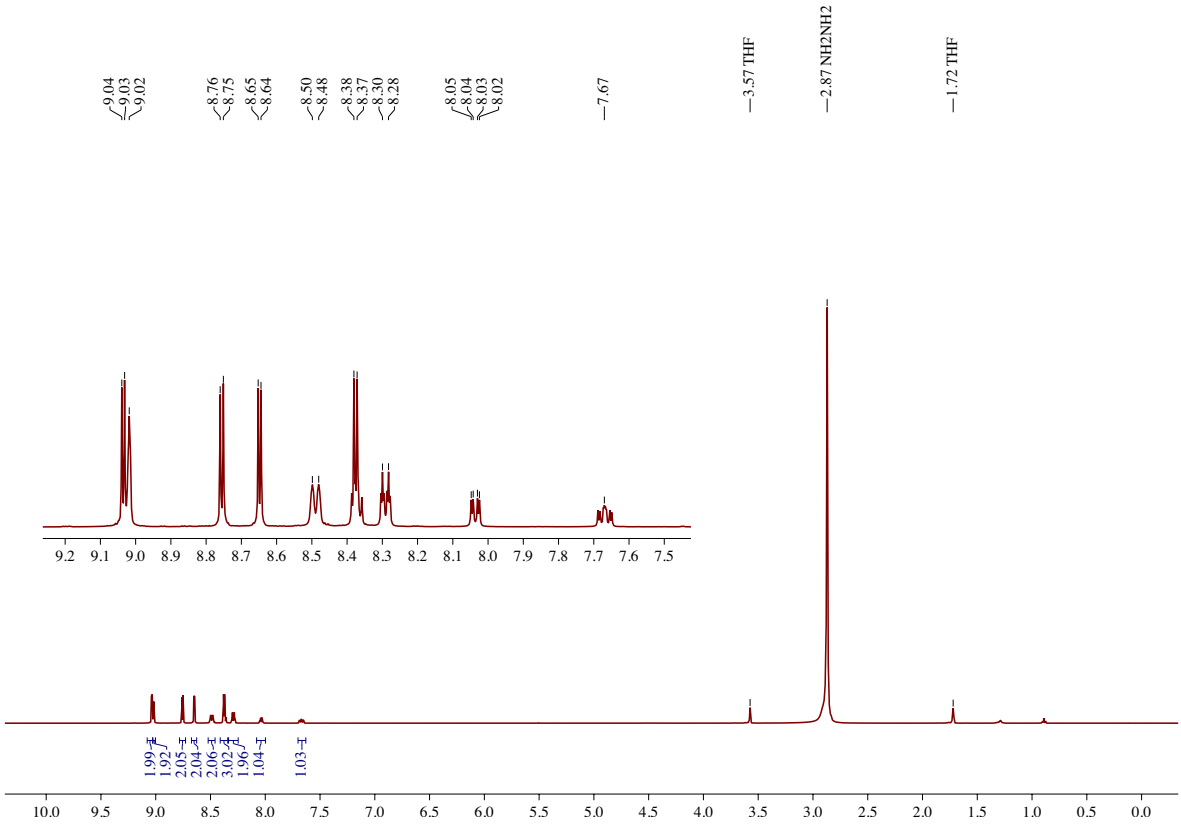

Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$

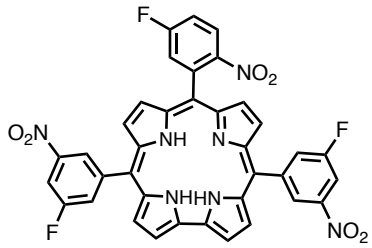
Exact Mass: 716.14999

Experimental: 716.15003

δ (ppm) = 0.06

**Figure S73:** ESI HRMS of 5,15-bis(3'-fluoro-5'-nitrophenyl)-10-(5'-fluoro-2'-nitrophenyl)corrole **16.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S74:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(3'-fluoro-5'-nitrophenyl)-10-(5'-fluoro-2'-nitrophenyl)corrole **16.**

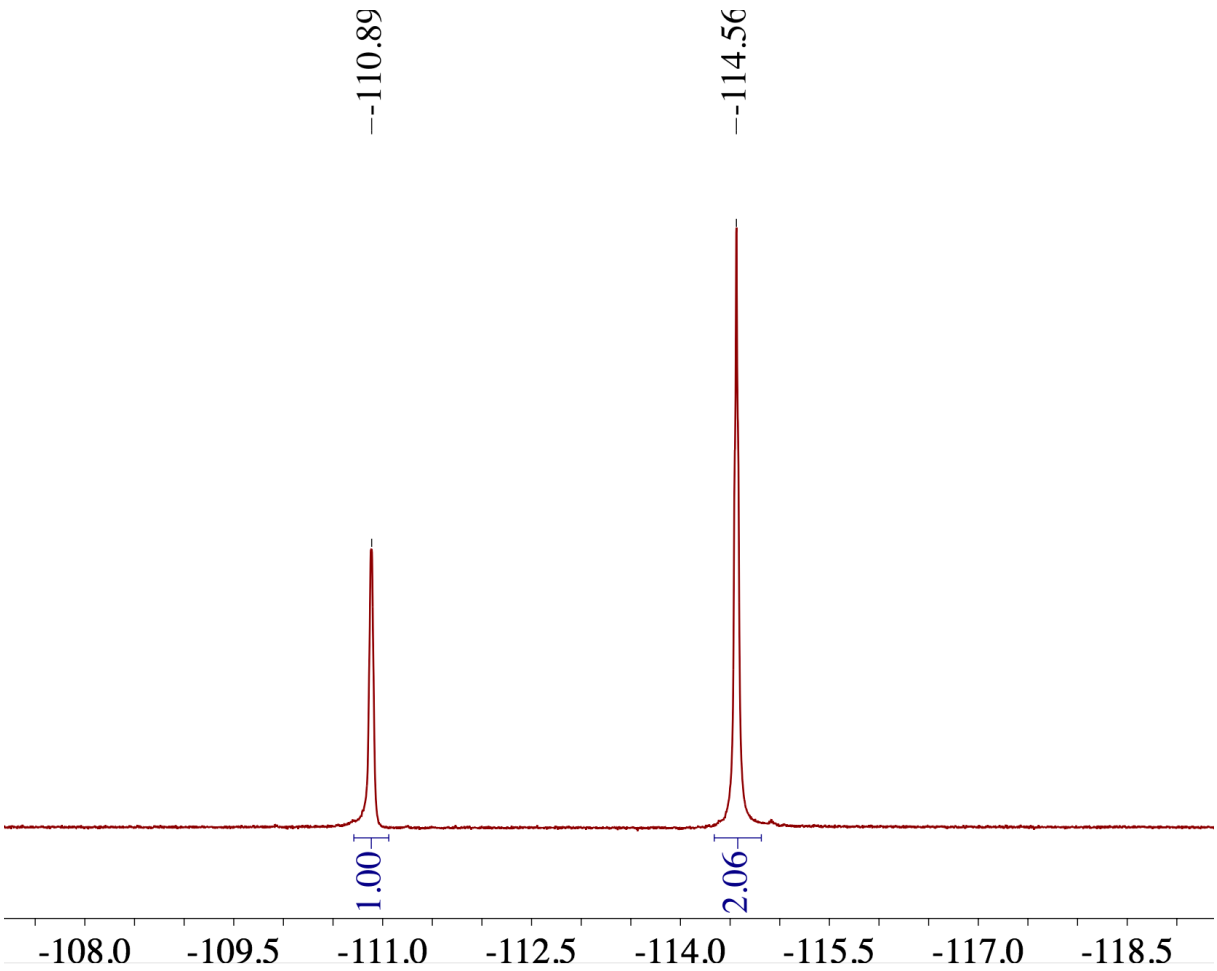


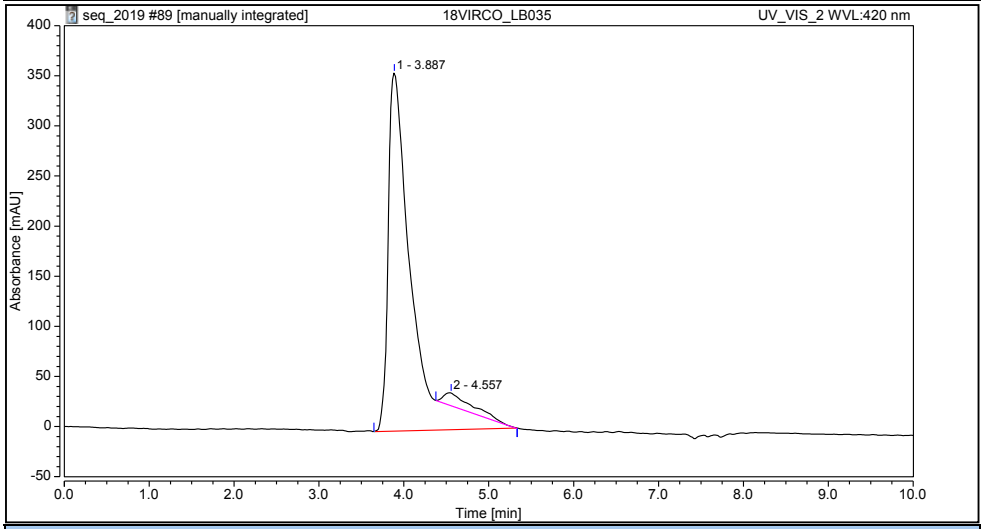

**Figure S75:** $^{19}$F NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(3'-fluoro-5'-nitrophenyl)-10-(5'-fluoro-2'-nitrophenyl)corrole **16.**

Chromatogram and Results

**Injection Details**

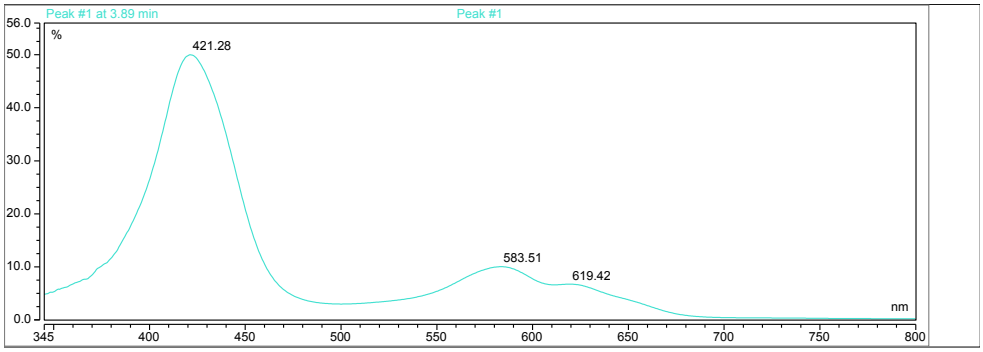
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB035** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA7** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 19:42** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.887 | 114.061 | 357.230 | 95.54 | 96.57 | n.a. |
| 2 | | 4.557 | 5.329 | 12.694 | 4.46 | 3.43 | n.a. |
| **Total:** | | | **119.390** | **369.923** | **100.00** | **100.00** | |



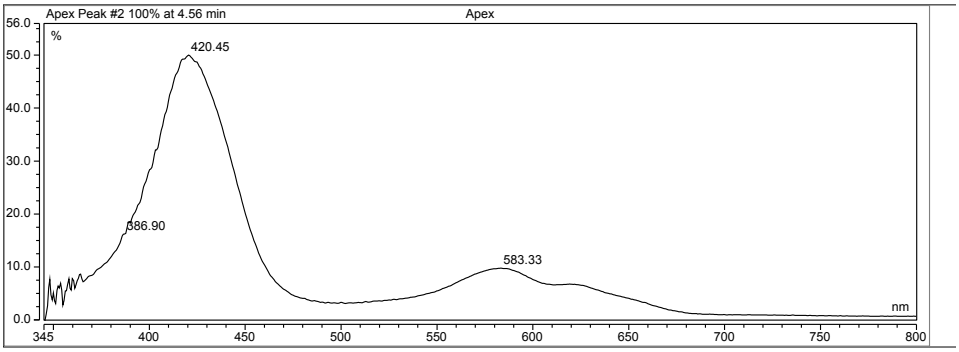
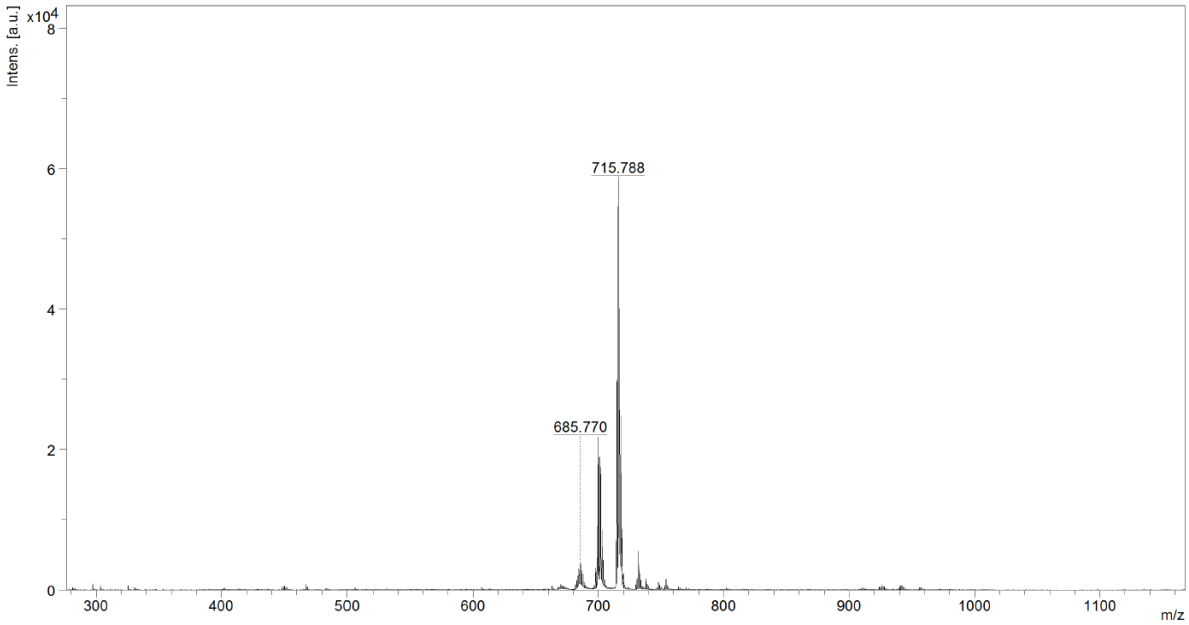
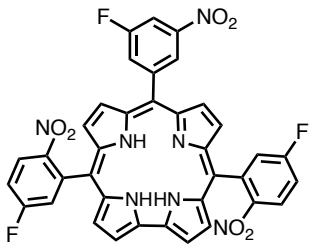



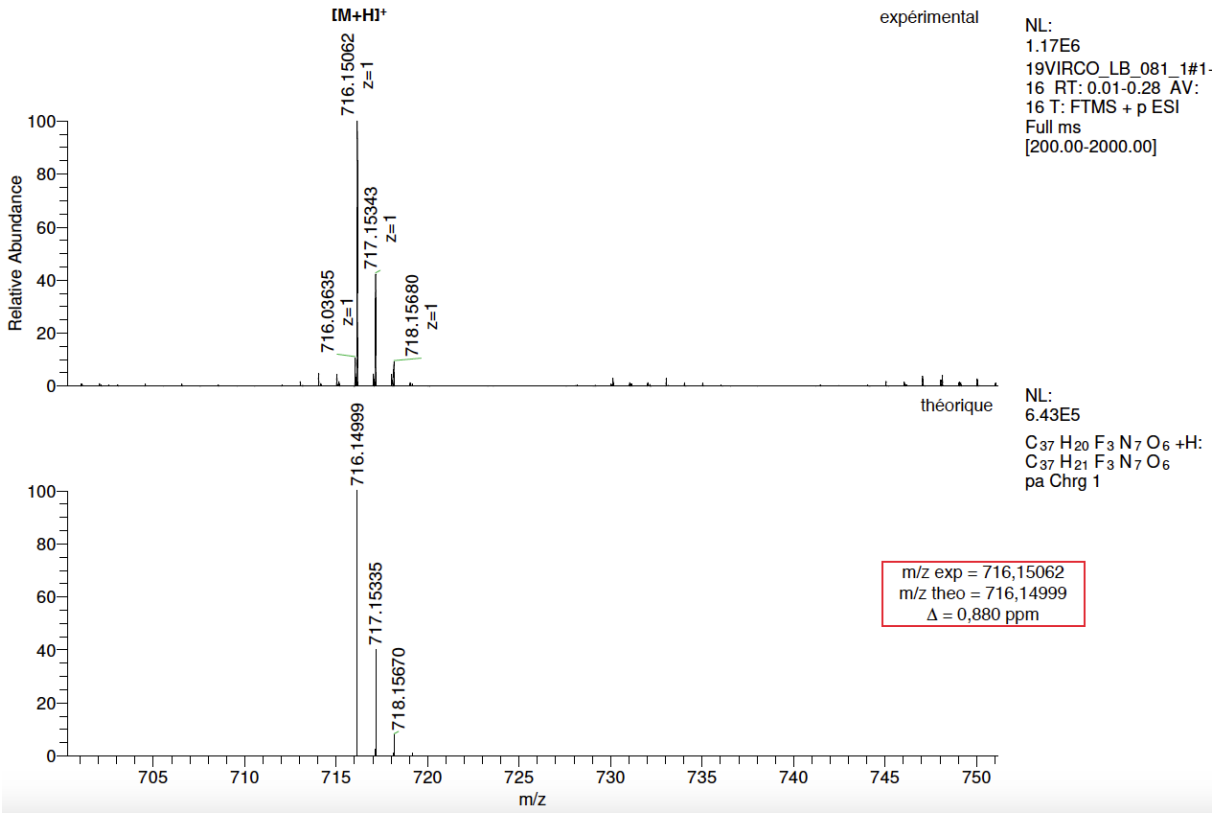

**Figure S76:** HPLC chromatogram of 5,15-bis(3'-fluoro-5'-nitrophenyl)-10-(5'-fluoro-2'-nitrophenyl)corrole **16.**

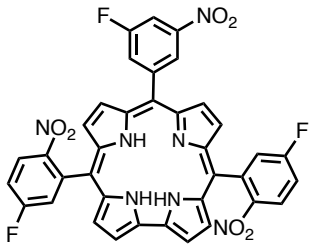



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure S77:** MALDI/TOF LRMS of 5,15-bis(5'-fluoro-2'-nitrophenyl)-10-(3'-fluoro-5'-nitrophenyl)corrole **17.**



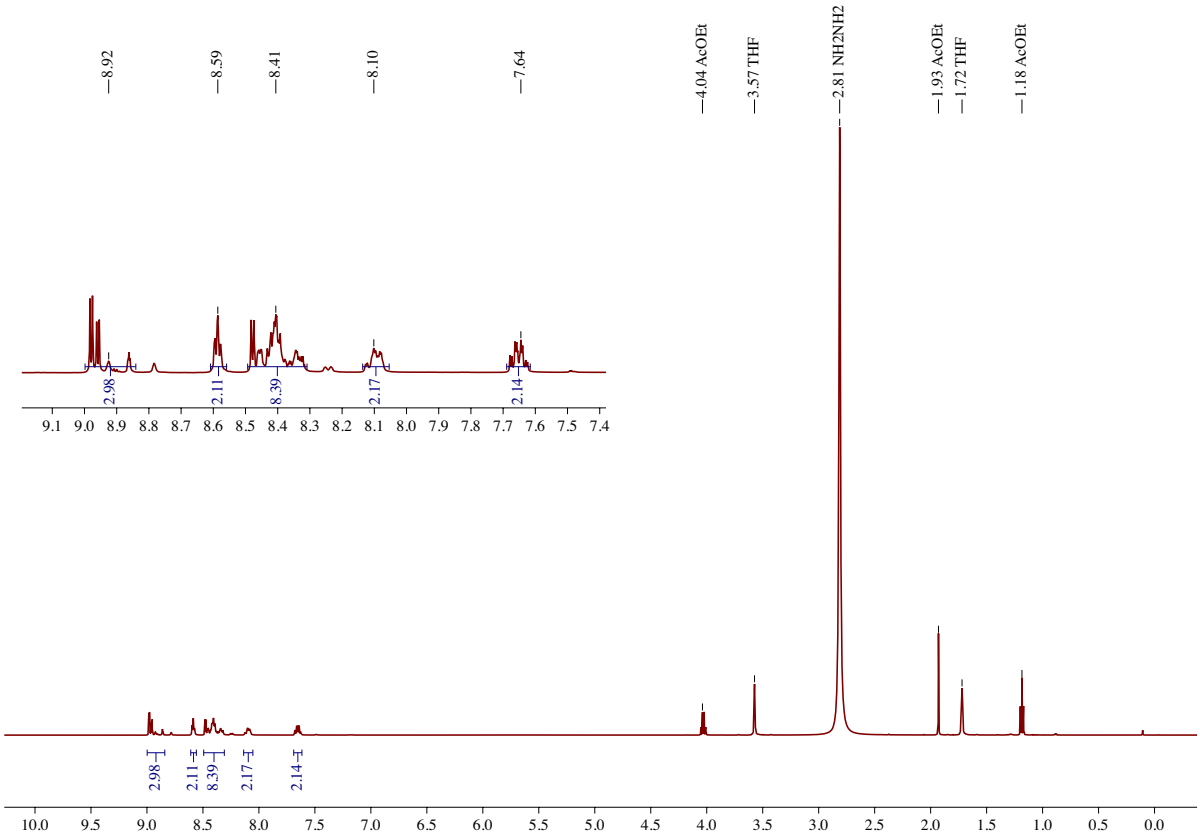

Chemical Formula $[M+H]^+$: $C_{37}H_{21}F_3N_7O_6$

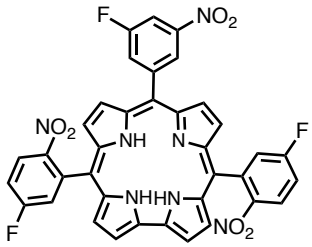
Exact Mass: 716.14966

Experimental: 716.15062

δ (ppm) = 0.880

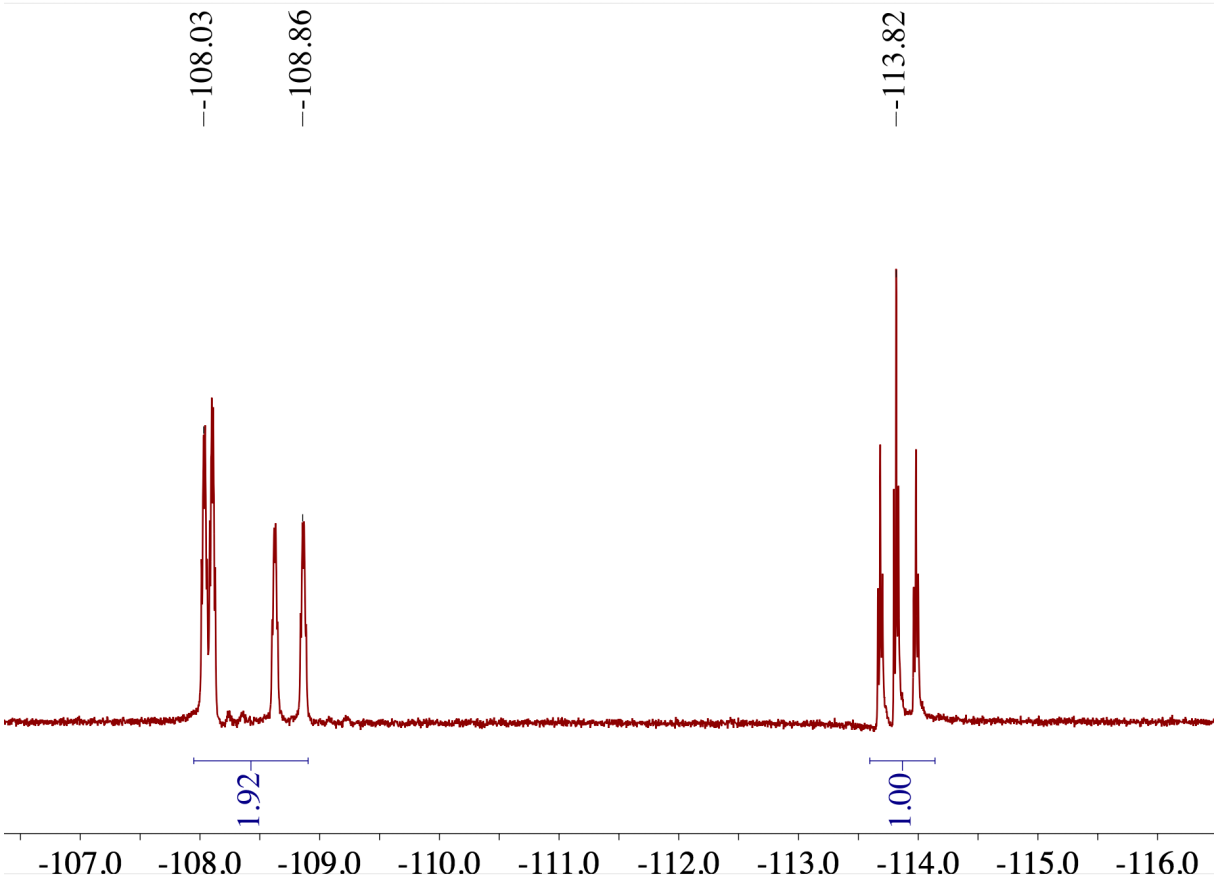
**Figure S78:** ESI HRMS of 5,15-bis(5'-fluoro-2'-nitrophenyl)-10-(3'-fluoro-5'-nitrophenyl)corrole **17.**

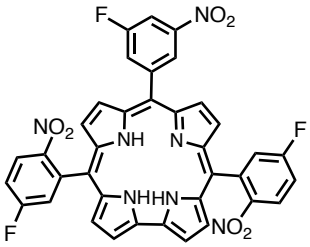



Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

**Figure 79:** $^1$H NMR spectrum (500 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(5'-fluoro-2'-nitrophenyl)-10-(3'-fluoro-5'-nitrophenyl)corrole **17.**




Chemical Formula: $C_{37}H_{20}F_3N_7O_6$
Exact Mass: 715.1427
Molecular Weight: 715.6052

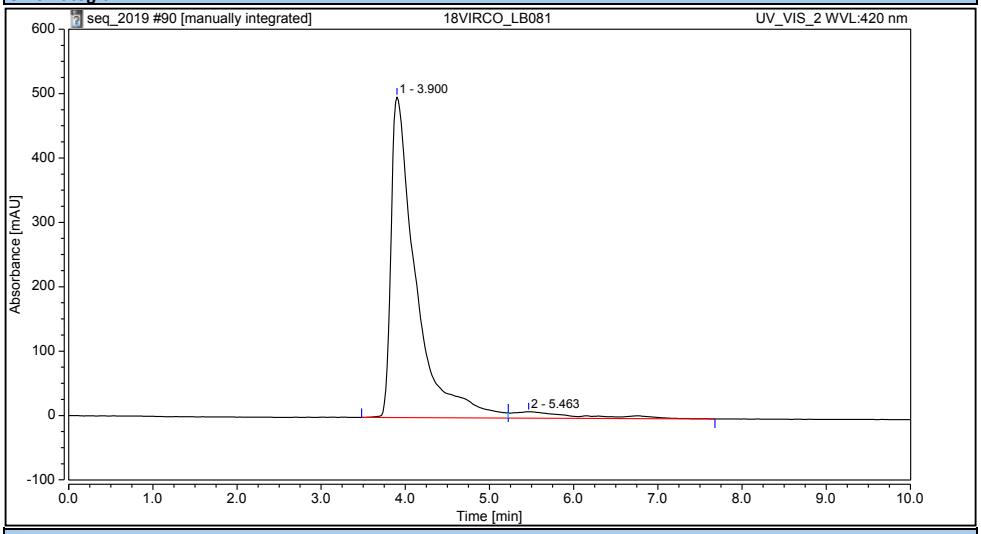
**Figure 80:** $^{19}$F NMR spectrum (470 MHz, THF-$d_8$ + one drop of hydrazine 64%) of 5,15-bis(5'-fluoro-2'-nitrophenyl)-10-(3'-fluoro-5'-nitrophenyl)corrole **17.**

Chromatogram and Results

**Injection Details**

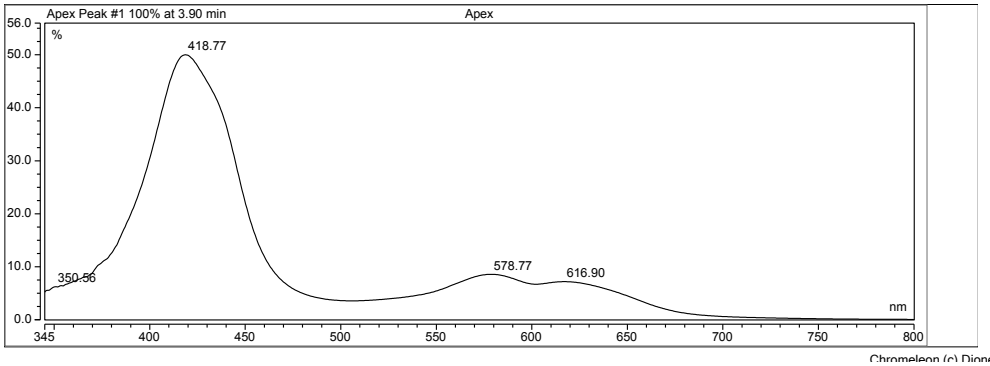
| | | | |
|---|---|---|---|
| *Injection Name:* | **18VIRCO_LB081** | *Run Time (min):* | **10.00** |
| *Vial Number:* | **BA8** | *Injection Volume:* | **2.00** |
| *Injection Type:* | **Unknown** | *Channel:* | **UV_VIS_2** |
| *Calibration Level:* | | *Wavelength:* | **420** |
| *Instrument Method:* | **MeOH_3%_modified** | *Bandwidth:* | **4** |
| *Processing Method:* | **Standard Processing Method** | *Dilution Factor:* | **1.0000** |
| *Injection Date/Time:* | **28/mai/19 19:53** | *Sample Weight:* | **1.0000** |

**Chromatogram**




**Integration Results**

| No. | Peak Name | Retention Time min | Area mAU*min | Height mAU | Relative Area % | Relative Height % | Amount n.a. |
|---|---|---|---|---|---|---|---|
| 1 | | 3.900 | 168.208 | 497.897 | 94.78 | 98.04 | n.a. |
| 2 | | 5.463 | 9.262 | 9.978 | 5.22 | 1.96 | n.a. |
| **Total:** | | | **177.470** | **507.875** | **100.00** | **100.00** | |



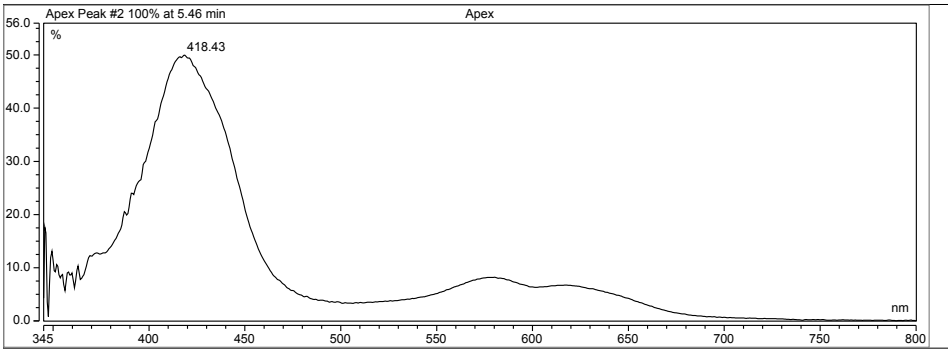




**Figure S81:** HPLC chromatogram of 5,15-bis(5'-fluoro-2'-nitrophenyl)-10-(3'-fluoro-5'-nitrophenyl)corrole **17.**

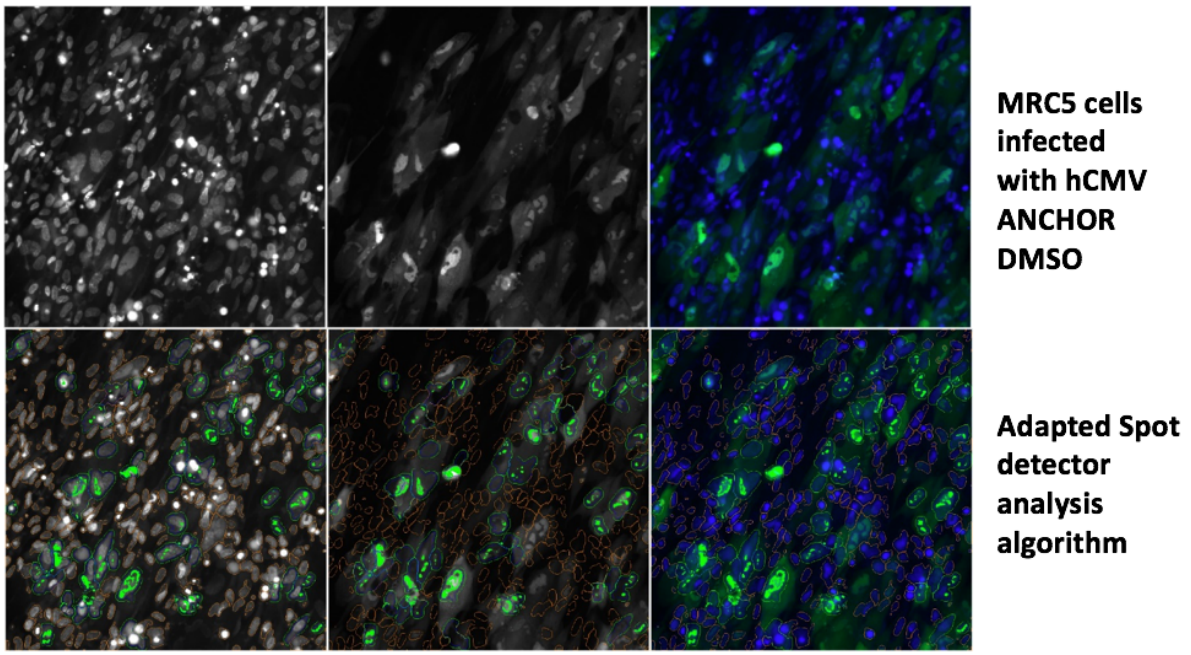
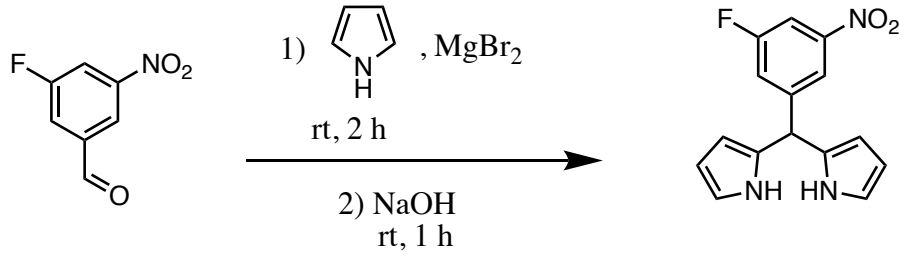



**Figure S82: example of the algorithm used to detect and measure infection parameters.** The spot detector algorithm on a cellInsight CX7 microscope was used. On top, raw images acquired by the microscope. Bottom, overlay of the algorithm result, where total nuclei are represented in brown, selected nuclei (infected cells) in blue and hCMV replication center detected in green. The integrated intensity of the green signal is used to calculate replication rate.

**Miscellaneous precursors syntheses.**

**Synthesis of 5-(3'-fluoro-5'-nitrophenyl)-dipyrromethane**




3-Fluoro-5-nitrobenzaldehyde (1.53 g, 9.05 mmol), purchased from Fluorochem, was added to pyrrole (67.8 mL, 904.74 mmol) in a round-bottom flask. Magnesium bromide (833.1 mg, 4.53 mmol) was introduced afterwards, then the reaction was left stirring in the dark at room temperature for 2 h. This solution was stirred one more hour after addition of sodium hydroxide in powder (1.81 g, 45.25 mmol). The mixture was filtrated over a Dicalite® plug and evaporated to dryness. The oily residue was purified with a $SiO_2$ plug (heptane/ethyl acetate 8:2) and subsequent washings with heptane (20 mL) and pentane (20 mL) to afford the dipyrromethane as a yellow solid with 71.0% yield (1.83 g).

$^1$H NMR (500 MHz, $CDCl_3$) δ (ppm): 8.01 (se 2H), 7.92 (m, 1H), 7.82 (m, 1H), 7.26 (m, 1H), 6.76 (m, 2H), 6.18 (m, 2H), ~~5.58~~ 5.88 (m, 2H), 5.57 (s, 1H).

HR-MS (ESI) m/z = 286.0970 $[M+H]^+$, 286.0986 calcd for $C_{15}H_{13}FN_3O_2$.

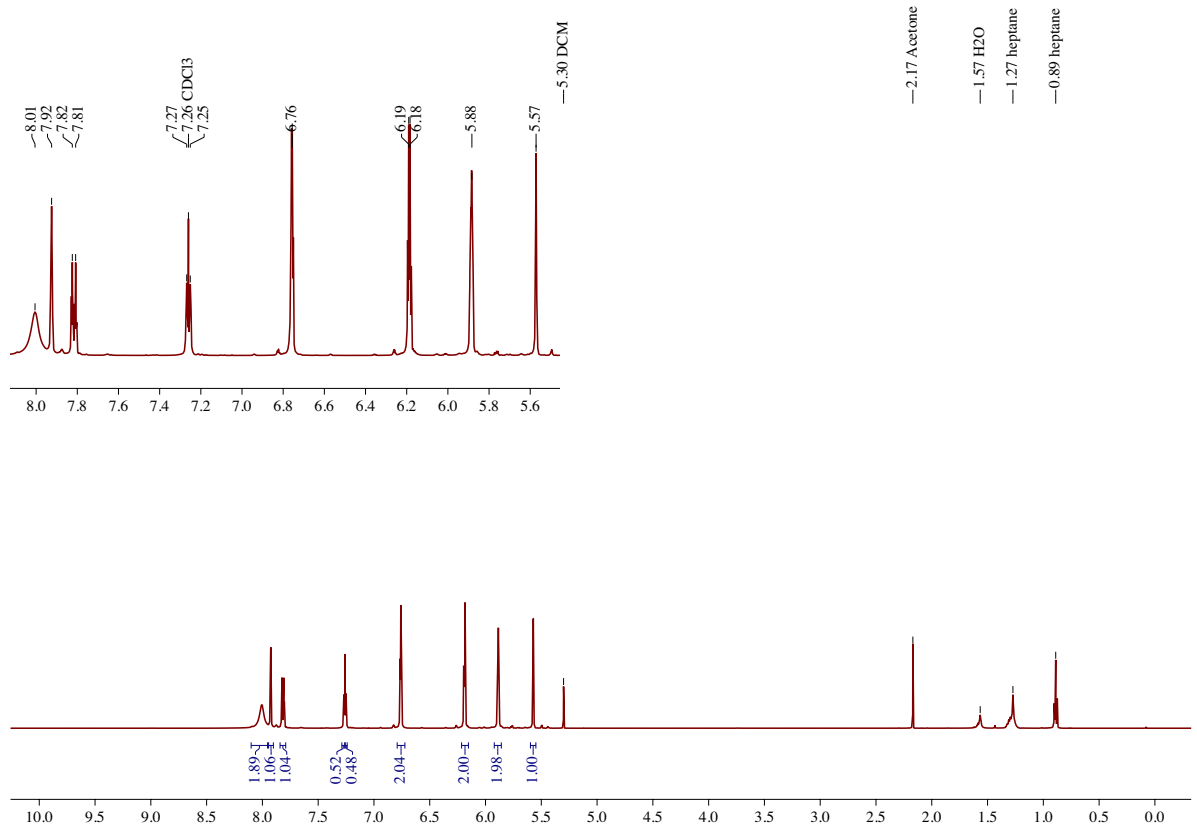



**Figure S83:** $^{1}H$ (500 MHz) NMR spectrum ($CDCl_3$) of 5-(3'-fluoro-5'-nitrophenyl)-dipyrromethane

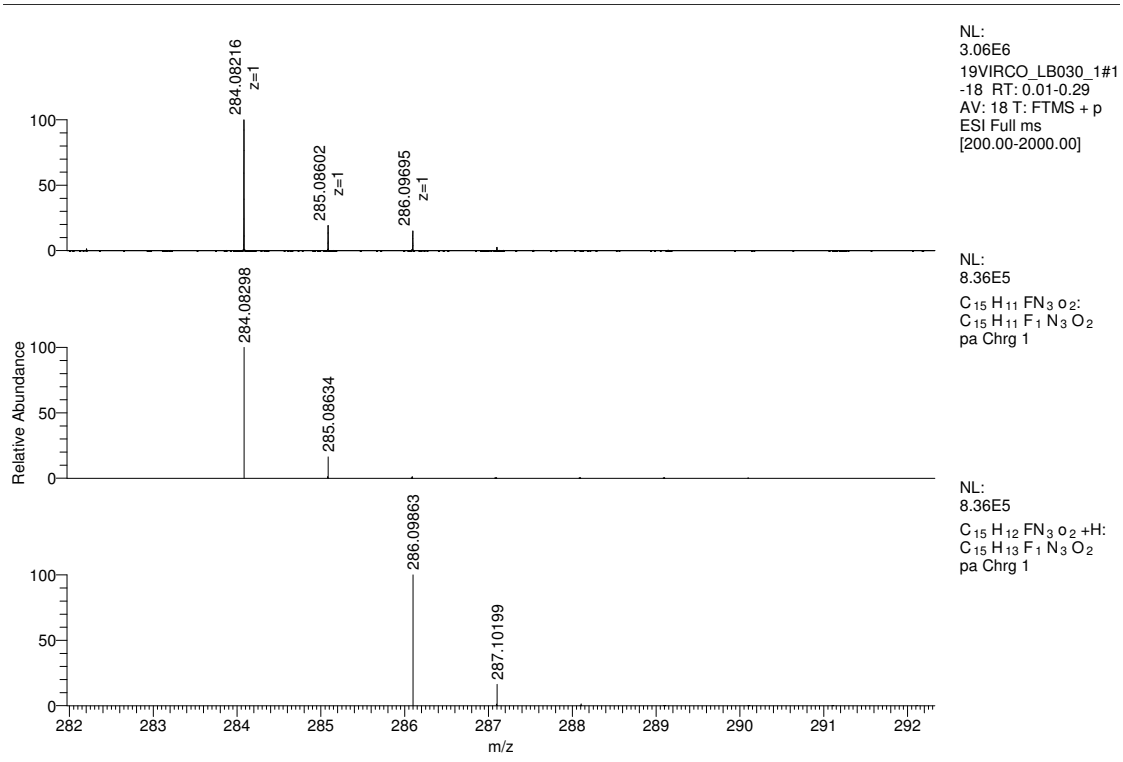



**Figure S84:** ESI HRMS mass spectrum of 5-(3'-fluoro-5'-nitrophenyl)-dipyrromethane

**Synthesis of 5-(5'-fluoro-2'-nitrophenyl)-dipyrromethane**

This compound was synthesized following a modified procedure described in the literature (Wu, Yanping et al., *Chemistry - An Asian Journal*, **2017**, *12* (17), 2216-2220).

5-Fluoro-2-nitrobenzaldehyde (5.00 g, 29.57 mmol) supplied by Fluorochem was added to pyrrole (205.1 mL, 2.96 mol) in a round-bottom flask. Magnesium bromide (2.72 g, 14.79 mmol) was introduced afterwards, then the reaction was left stirring in the dark at room temperature for 2 h. This solution was stirred one more hour after addition of sodium hydroxide in powder (5.91 g, 147.85 mmol). The mixture was filtrated over a Dicalite® plug and evaporated to dryness. The oily residue was purified with a $SiO_2$ plug (heptane/ethyl acetate 8:2) and recrystallization in heptane to afford the dipyrromethane as a yellow solid with 70.4% yield (5.96 g).

$^1$H NMR (500 MHz, $CDCl_3$) δ (ppm): 8.14 (s, 2H), 7.98 (m, 1H), 7.06 (m, 1H), 6.92 (m, 1H), 6.73 (m, 2H), 6.29 (s, 1H), 6.16 (m, 2H), 5.87 (m, 2H).

LR-MS (ESI) m/z = 283.86 $[M-H]^-$, 284.08 calcd for $C_{15}H_{11}FN_3O_2$.

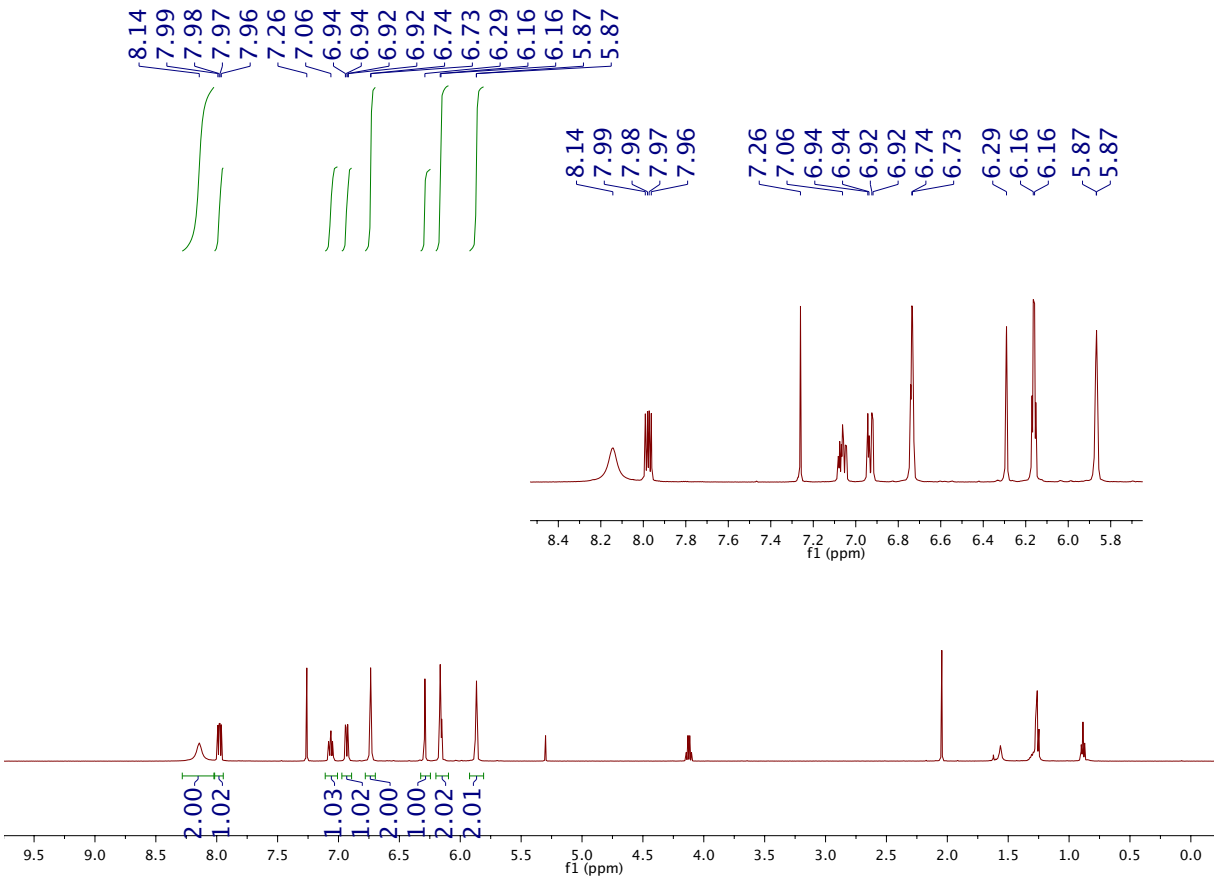



**Figure S85:** $^1$H (500 MHz) NMR spectrum ($CDCl_3$) of 5-(5'-fluoro-2'-nitrophenyl)-dipyrromethane

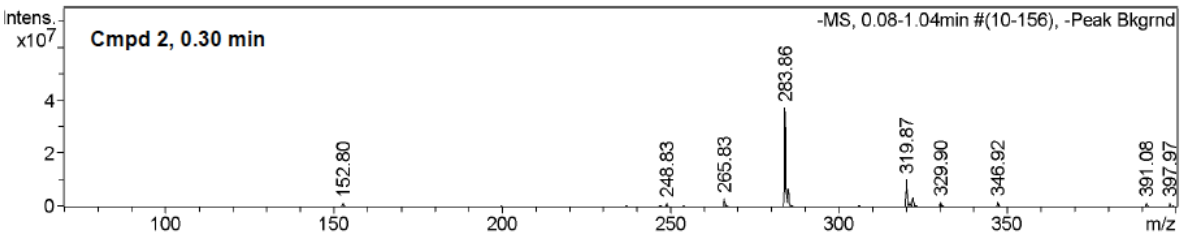
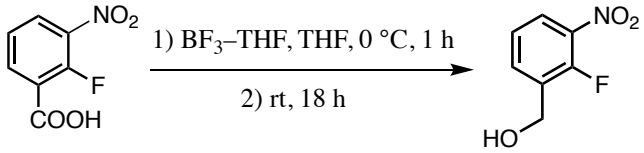



**Figure S86:** ESI LRMS mass spectrum of 5-(5'-fluoro-2'-nitrophenyl)-dipyrromethane

**Synthesis of 2-fluoro-3-nitrobenzyl alcohol**

This compound was synthesized following a slightly modified procedure described in the literature (Ashton, Susan Elizabeth et al. *PCT Int. Appl.,* 2008104754, 04 Sep **2008**).




2-Fluoro-3-nitrobenzoic acid (3.00 g, 16.21 mmol) from Fluorochem was introduced in a round-bottom flask. After vacuum/argon cycles, dry THF (25 mL) was added and the solution was cooled down to 0 °C. A borane tetrahydrofuran solution (1 M in THF, 81.05 mL, 81.05 mmol) was dropwisely added at this temperature over 1 h. The mixture was left freely warming up overnight (for 14 hours), then was cooled down again to 0 °C before quenching with methanol (10 mL) then water (100 mL). The product was extracted with ethyl acetate (3x100 mL), washed with water (100 mL) and dried over $MgSO_4$ before evaporation to dryness. The crude compound was purified with a $SiO_2$ plug (ethyl acetate/heptane 5:5) to afford the expected alcohol derivative as a yellow oil with 99.7% yield (2.77 g).

$^1$H NMR (500 MHz, $CDCl_3$) δ (ppm): 7.96 (m, 1H), 7.79 (m, 1H), 7.30 (t, $^3J$ = 8.0 Hz, 1H), 4.86 (s, 2H).

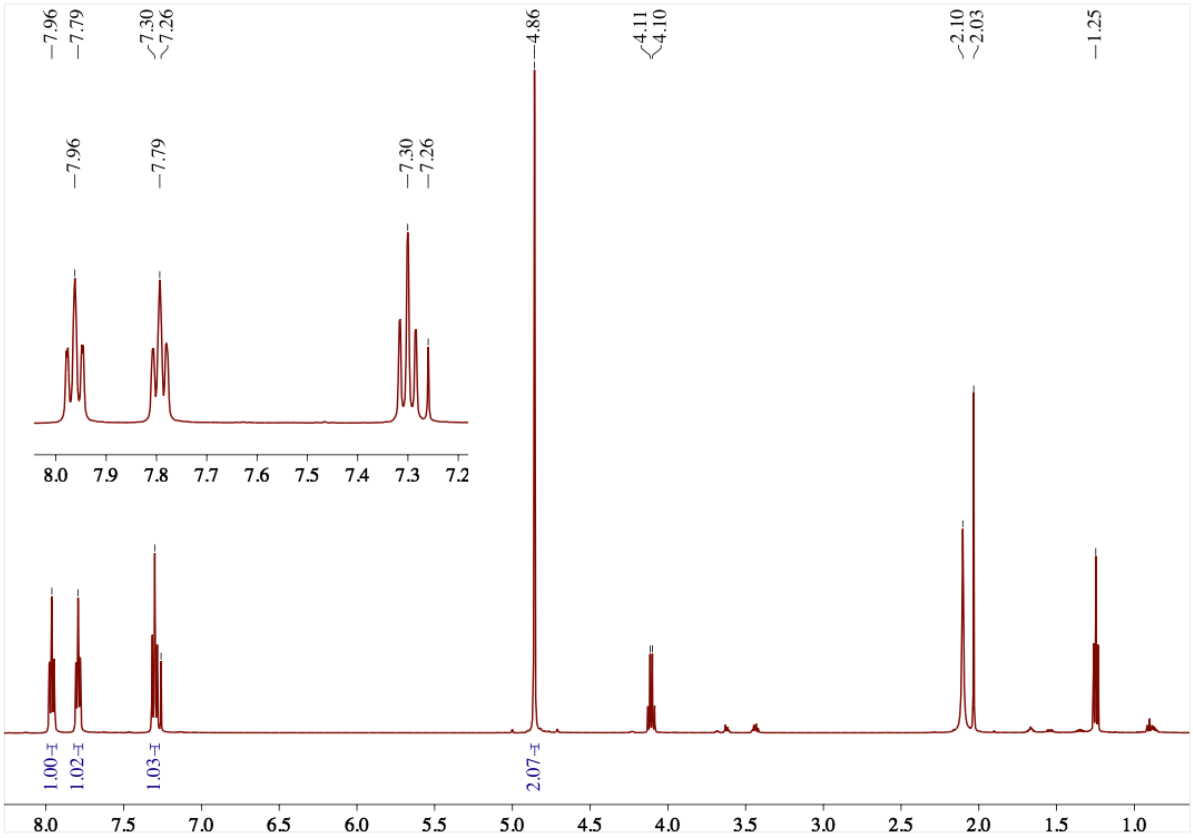
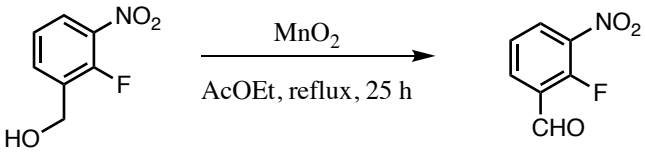



**Figure S87:** $^{1}$H NMR spectrum (500 MHz, $CDCl_3$) of 2-fluoro-3-nitrobenzyl alcohol

**Synthesis of 2-fluoro-3-nitrobenzaldehyde**

This compound was synthesized following a modified procedure described in the literature (Kanno, Hideo et al. *Chemical & Pharmaceutical Bulletin*, **1992**, *40* (8), 2049-2054).




2-Fluoro-3-nitrobenzyl alcohol (2.77 g, 16.17 mmol) was added to a round-bottom flask with manganese(II) oxide (11.6 g, 113.17 mmol)) and ethyl acetate (100 mL). The mixture was left refluxing for 2.5 h, and was directly filtrated over a Dicalite® plug in order to remove insoluble materials. After evaporation to dryness, the crude compound was purified with a $SiO_2$ plug (ethyl acetate/heptane 5:5) to give the aldehyde as a yellow sticky solid with 85.4% yield (2.34 g).

$^{1}$H NMR (500 MHz, $CDCl_3$) δ (ppm): 10.41 (s, 1H), 8.31 (m, 1H), 8.17 (m, 1H), 7.47 (t, $^{3}J$ = 8.0 Hz, 1H).

$^{19}$F NMR (470 MHz, $CDCl_3$) δ (ppm): -128.99 (t, $^{4}J_{F-H}$= 7.0 Hz, 1F).

$^{13}$C (125 MHz, $CDCl_3$) δ (ppm): 184.9, 158.6, 156.4, 134.1, 131.6, 126.3, 124.9.

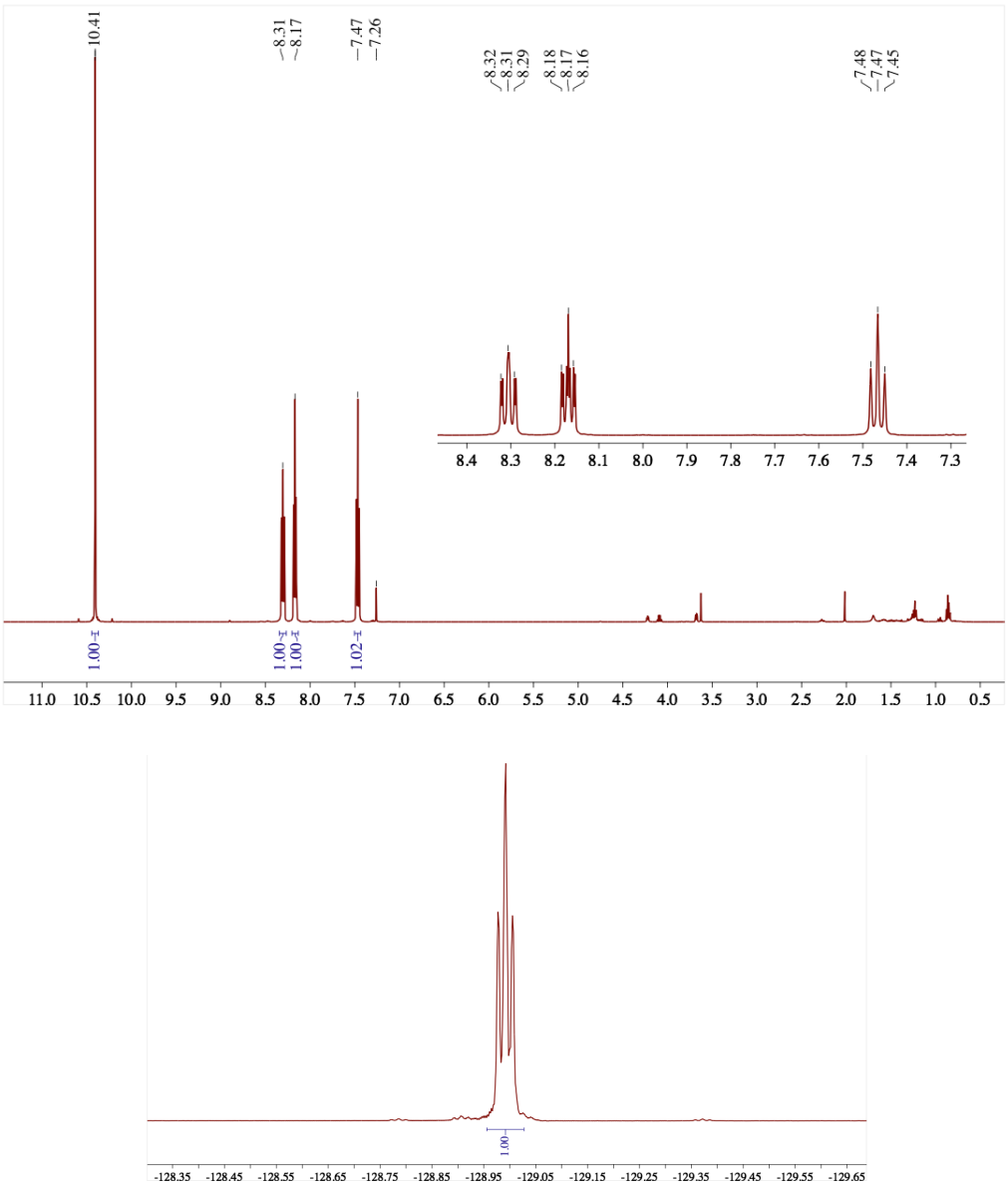



**Figure S88.** $^{1}H$ (500 MHz, $CDCl_3$) and $^{19}F$ (470 MHz, $CDCl_3$) NMR spectra of 2-fluoro-3-nitrobenzaldehyde

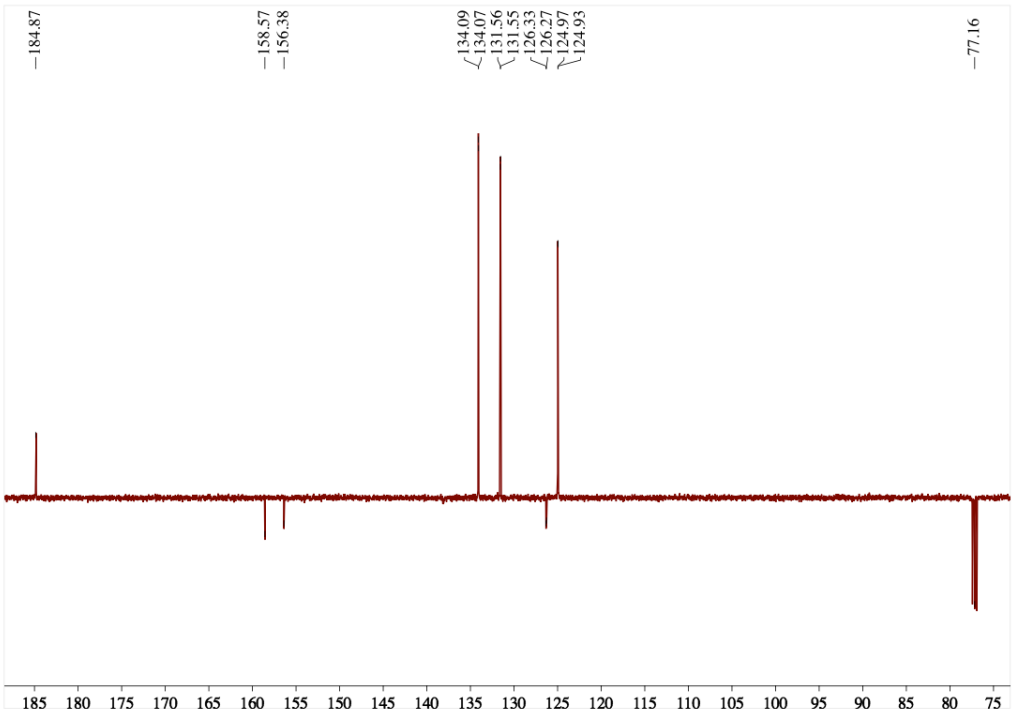



**Figure S89.** $^{13}C$ (125 MHz, J-mode, $CDCl_3$) NMR spectrum of 2-fluoro-3-nitrobenzaldehyde