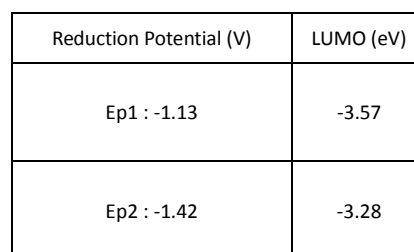
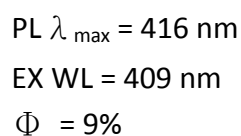
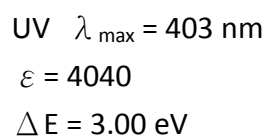
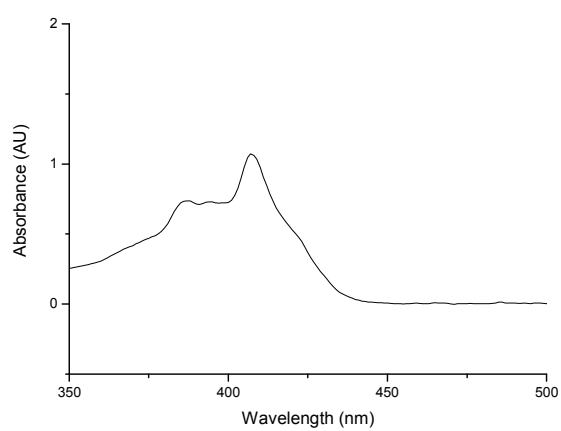
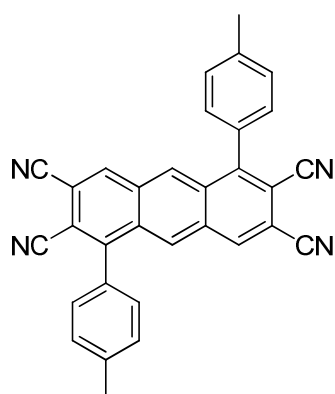


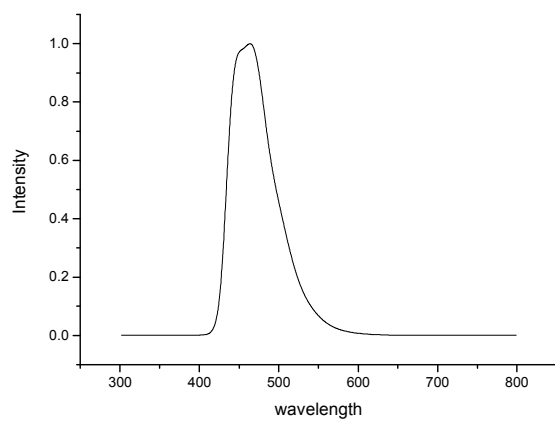
N#Cc1ccc2c(c1)ccc3c2c(C#N)cc(C#N)c3



UV  $\lambda_{\max} = 407 \text{ nm}$

$\varepsilon = 10692$

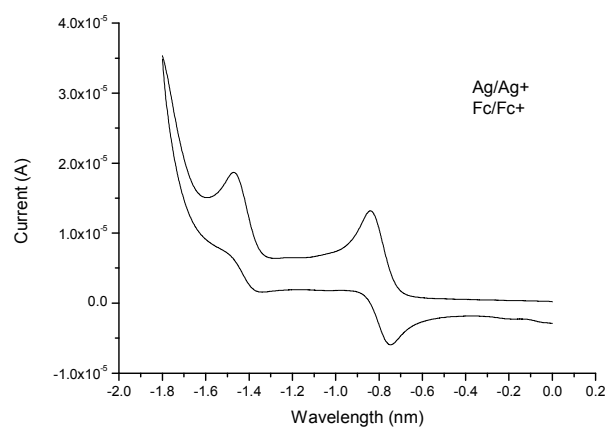
$\Delta E = 2.84 \text{ eV}$



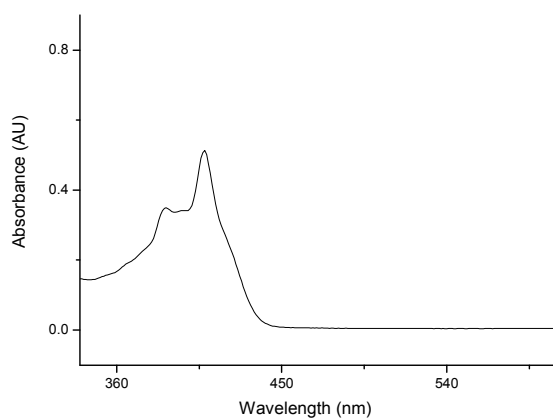
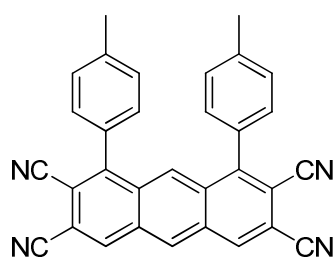
PL  $\lambda_{\max} = 464 \text{ nm}$

EX WL = 416 nm

$\Phi = 29\%$



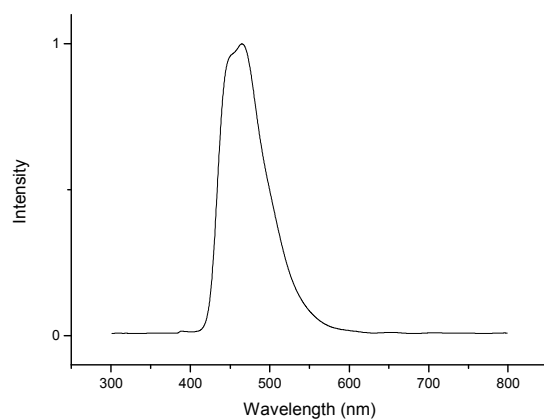
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.75             | Ep <sub>1/2</sub> : -0.80 | -3.42     |
| Ep2 : -0.84             |                           |           |
| Ep3 : -1.35             | Ep <sub>1/2</sub> : -1.41 | -2.81     |
| Ep4: -1.47              |                           |           |



UV  $\lambda_{\max} = 408 \text{ nm}$

$\varepsilon = 5100$

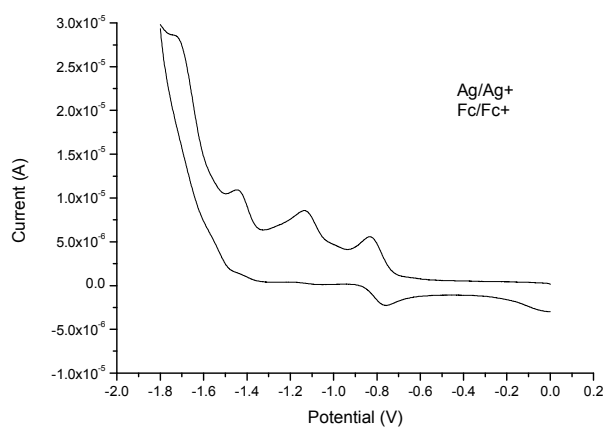
$\Delta E = 2.84 \text{ eV}$



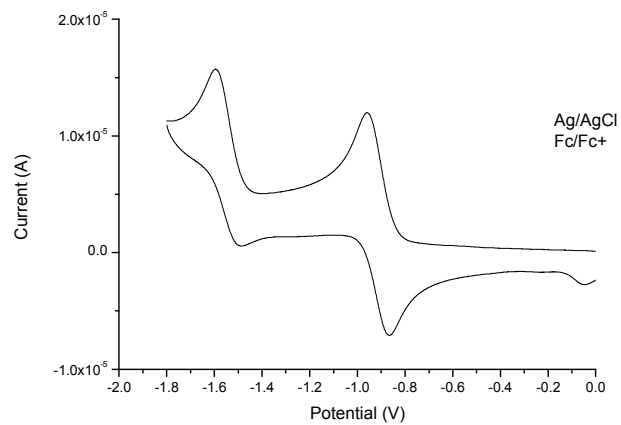
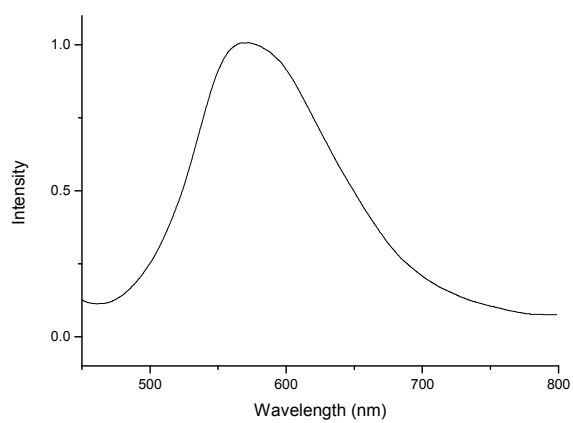
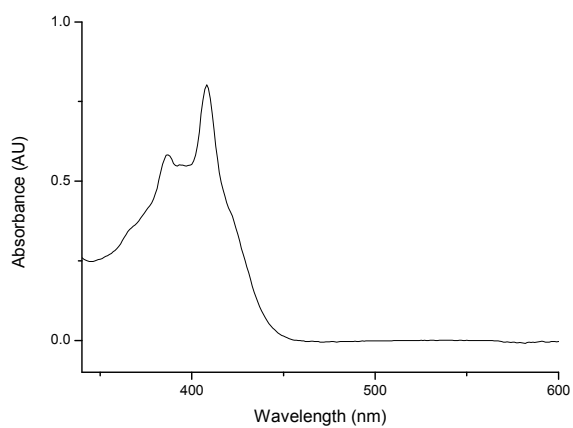
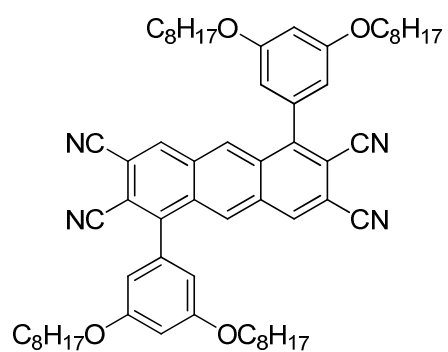
PL  $\lambda_{\max} = 465 \text{ nm}$

EX WL = 387 nm

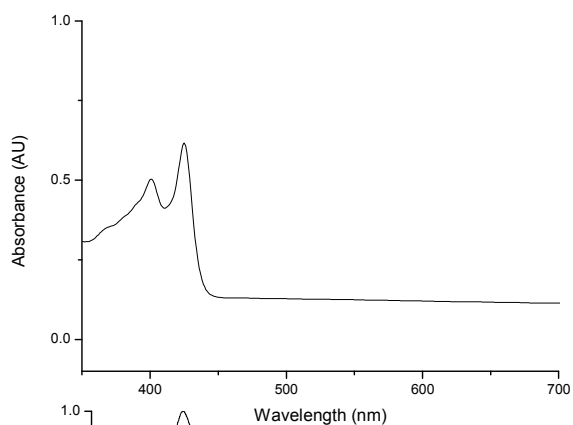
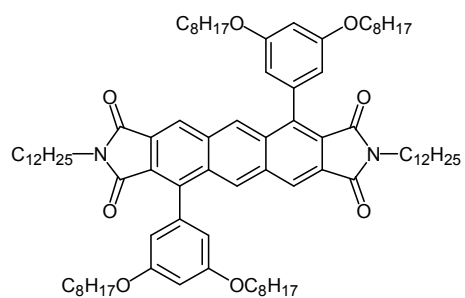
$\Phi = 19\%$



| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.76             | Ep <sub>1/2</sub> : -0.80 | -3.42     |
| Ep2 : -0.83             |                           |           |
| Ep3: -1.45              |                           | -2.77     |



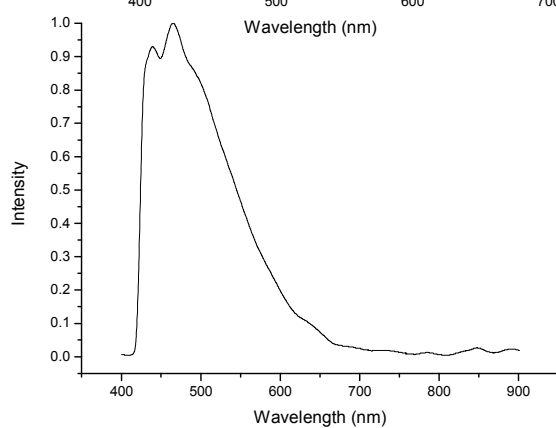
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.86             | Ep <sub>1/2</sub> : -0.91 | -3.40     |
| Ep2 : -0.96             |                           |           |
| Ep3 : -1.50             | Ep <sub>1/2</sub> : -1.55 | -2.76     |
| Ep4 : -1.60             |                           |           |



UV  $\lambda_{\text{max}} = 425 \text{ nm}$

$\epsilon = 6160$

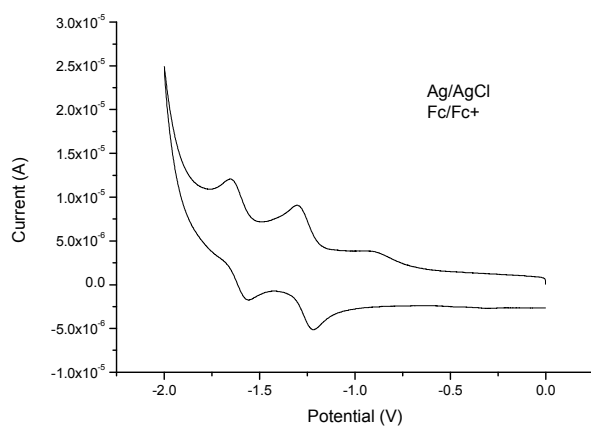
$\Delta E = 2.84 \text{ eV}$



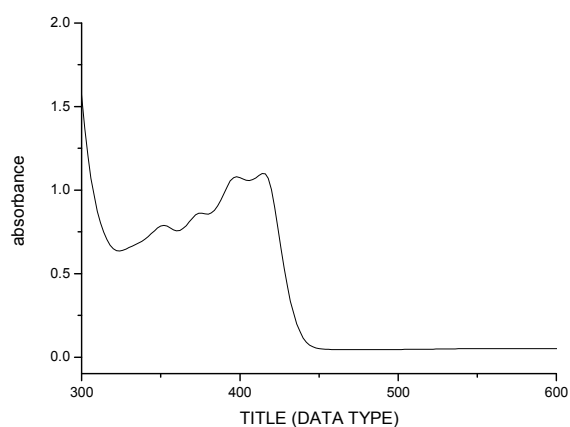
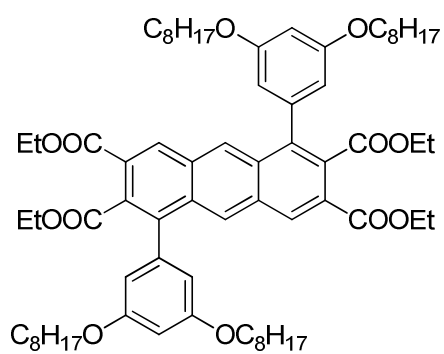
PL  $\lambda_{\text{max}} = 465 \text{ nm}$

EX WL = 425 nm

$\Phi = 0.9\%$



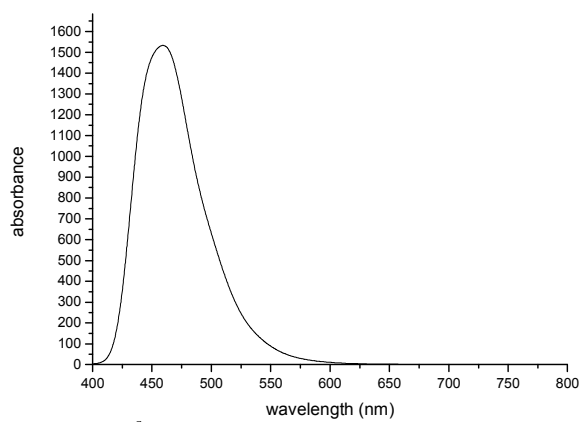
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -1.22             | Ep <sub>1/2</sub> : -1.26 | -3.05     |
| Ep2 : -1.30             |                           |           |
| Ep3 : -1.56             | Ep <sub>1/2</sub> : -1.61 | -2.70     |
| Ep4 : -1.65             |                           |           |



UV  $\lambda_{\text{max}} = 415 \text{ nm}$

$\epsilon = 4156$

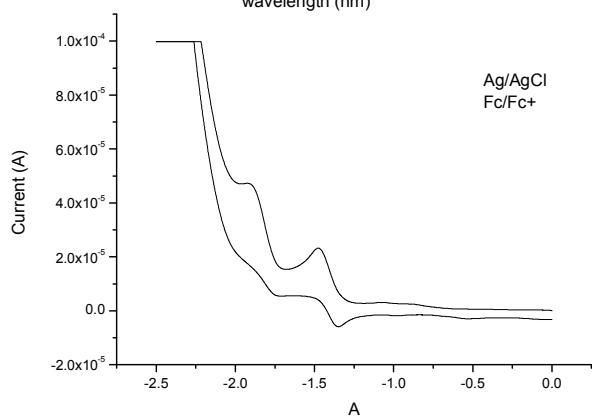
$\Delta E = 2.86 \text{ eV}$



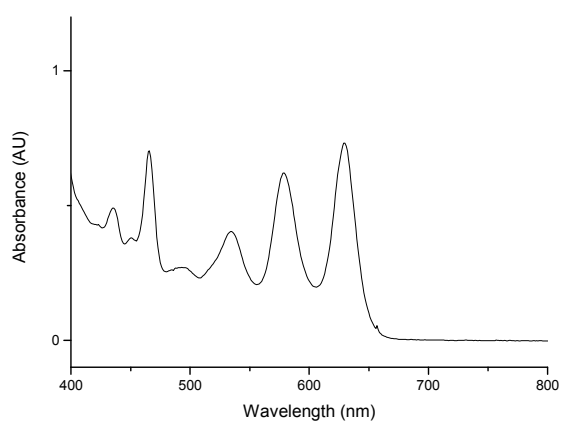
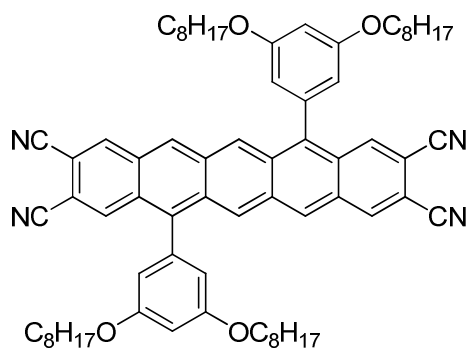
PL  $\lambda_{\text{max}} = 459 \text{ nm}$

EX WL = 372 nm

$\Phi = 48\%$



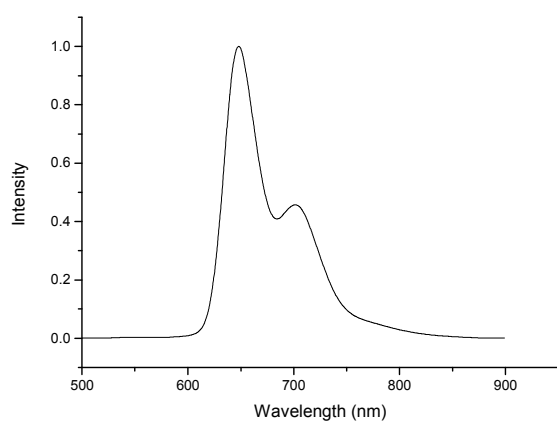
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -1.35             | Ep <sub>1/2</sub> : -1.41 | -2.90     |
| Ep2 : -1.47             |                           |           |
| Ep3 : -1.74             | Ep <sub>1/2</sub> : -1.83 | -2.48     |
| Ep4 : -1.91             |                           |           |



UV  $\lambda_{\max} = 630 \text{ nm}$

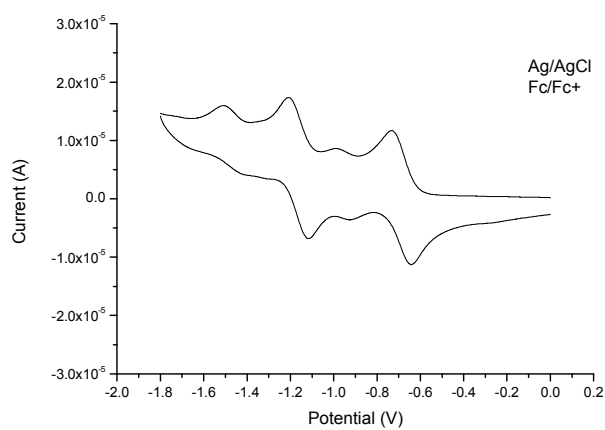
$\varepsilon = 7320$

$\Delta E = 1.91 \text{ eV}$

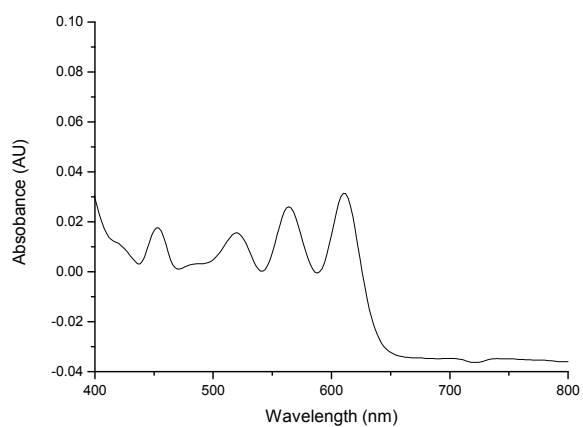
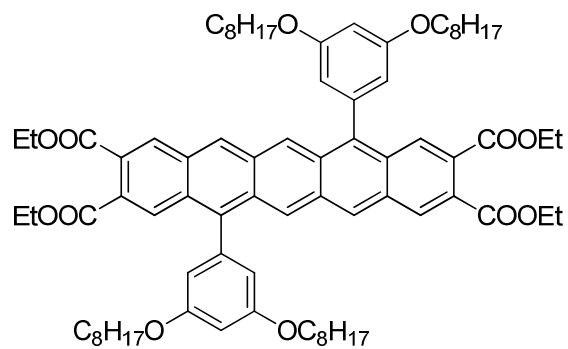


PL  $\lambda_{\max} = 648 \text{ nm}$

EX WL = 630 nm



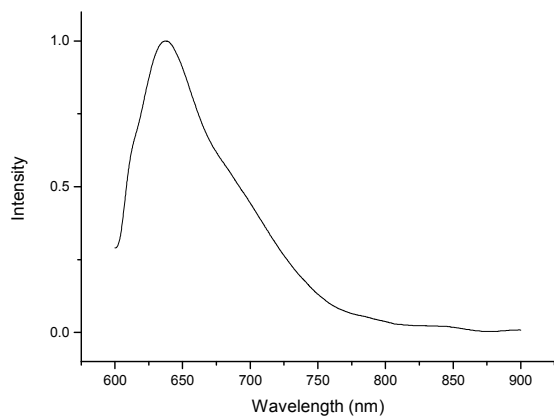
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.64             | Ep <sub>1/2</sub> : -0.69 | -3.62     |
| Ep2 : -0.73             |                           |           |
| Ep3 : -1.12             | Ep <sub>1/2</sub> : -1.17 | -3.14     |
| Ep4 : -1.21             |                           |           |



UV  $\lambda_{\max} = 611 \text{ nm}$

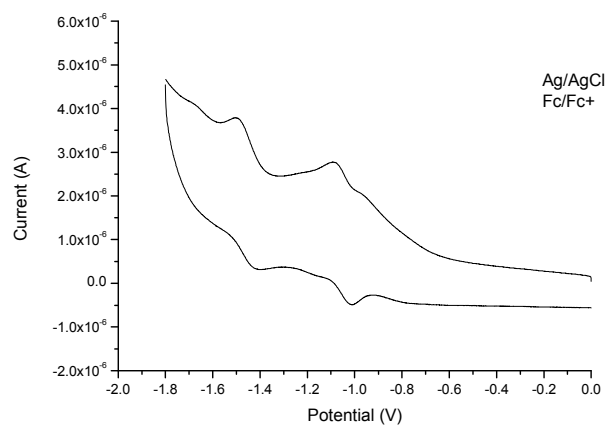
$\varepsilon = 1933$

$\Delta E = 1.93 \text{ eV}$



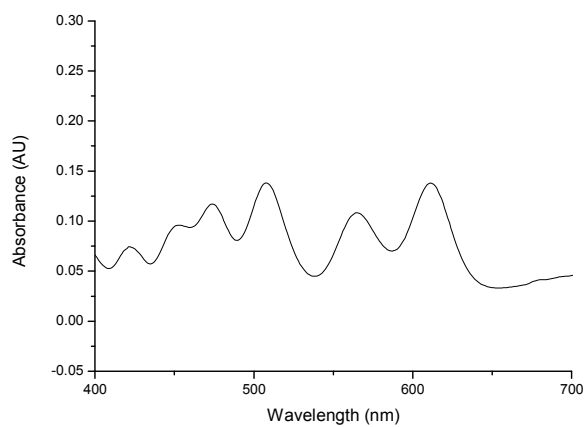
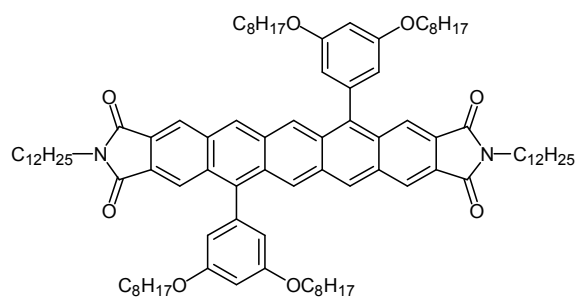
PL  $\lambda_{\max} = 637 \text{ nm}$

EX WL = 611 nm



| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -1.01             | Ep <sub>1/2</sub> : -1.05 | -3.28     |
| Ep2 : -1.08             |                           |           |
| Ep3 : -1.41             | Ep <sub>1/2</sub> : -1.46 | -2.87     |
| Ep4: -1.46              |                           |           |

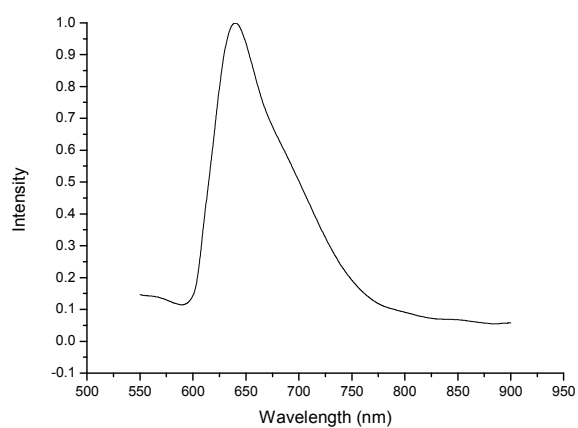




UV  $\lambda_{\text{max}} = 611 \text{ nm}$

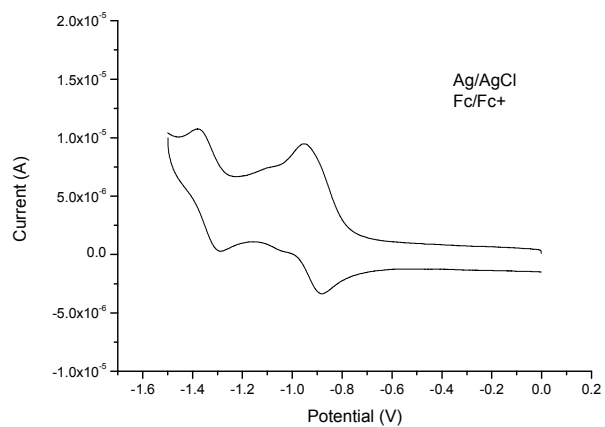
$\epsilon = 1380$

$\Delta E = 1.95 \text{ eV}$

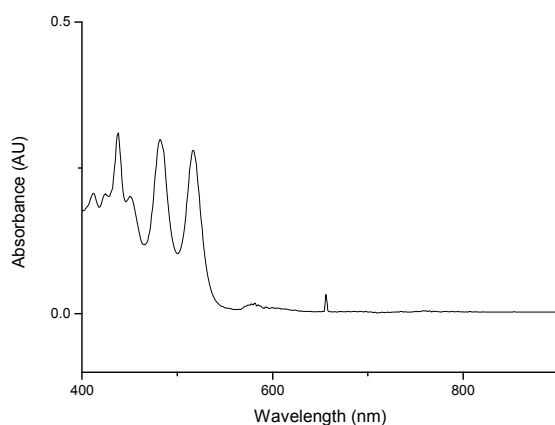
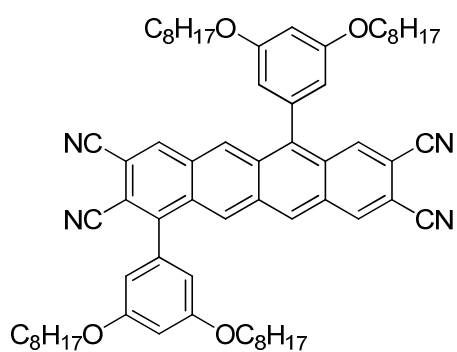


PL  $\lambda_{\text{max}} = 640 \text{ nm}$

EX WL = 611 nm



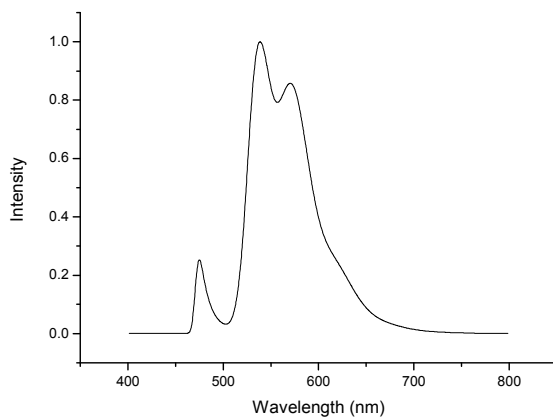
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.88             | Ep <sub>1/2</sub> : -0.92 | -3.39     |
| Ep2 : -0.95             |                           |           |
| Ep3 : -1.29             | Ep <sub>1/2</sub> : -1.34 | -2.97     |
| Ep4 : -1.38             |                           |           |



UV  $\lambda_{\text{max}} = 516 \text{ nm}$

$\varepsilon = 3955$

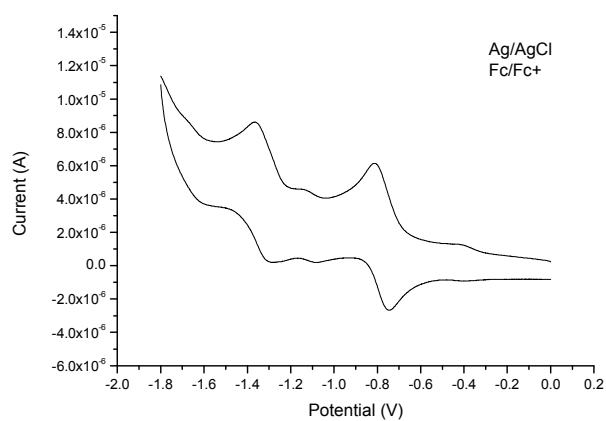
$\Delta E = 2.32 \text{ eV}$



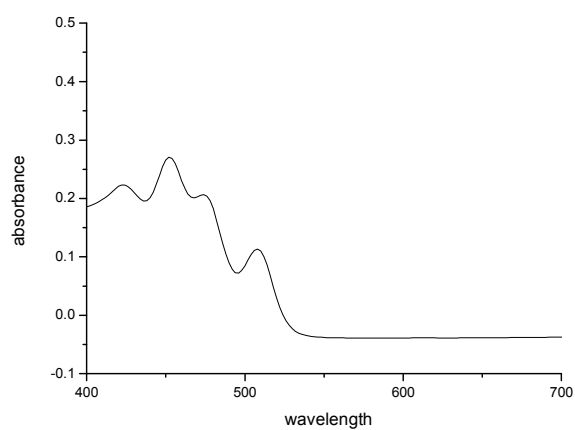
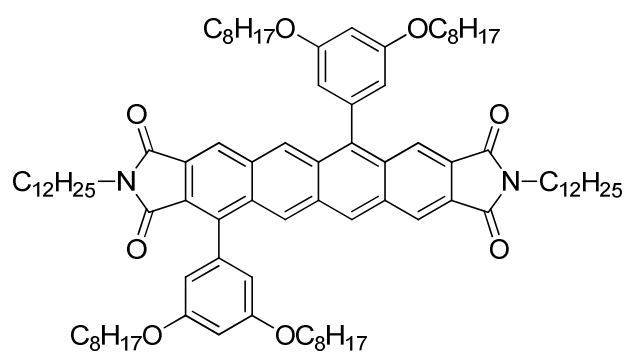
PL  $\lambda_{\text{max}} = 570 \text{ nm}$

EX WL = 473 nm

$\Phi = 20\%$



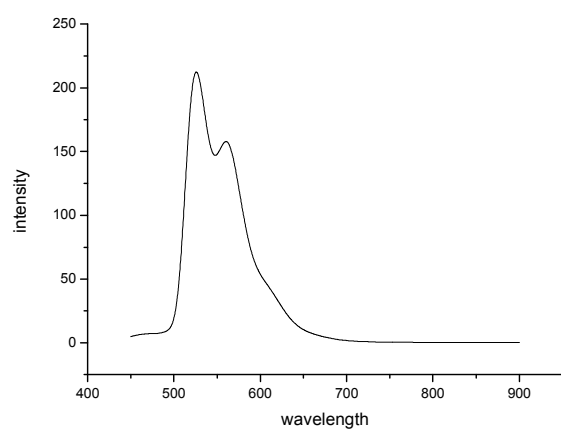
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -0.75             | Ep <sub>1/2</sub> : -0.78 | -3.53     |
| Ep2 : -0.81             |                           |           |
| Ep3 : -1.29             | Ep <sub>1/2</sub> : -1.33 | -2.98     |
| Ep4: -1.33              |                           |           |



UV  $\lambda_{\text{max}} = 508 \text{ nm}$

$\varepsilon = 1932$

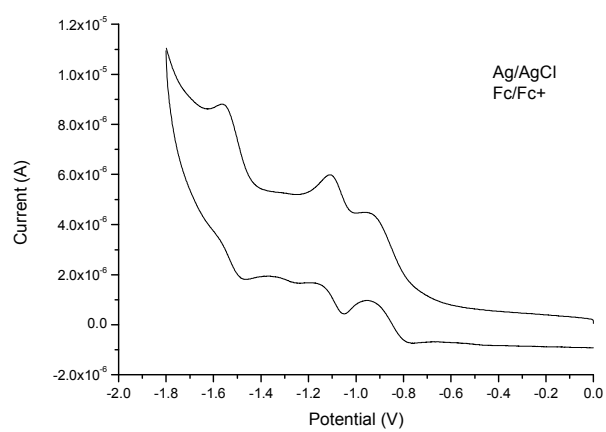
$\Delta E = 2.35 \text{ eV}$



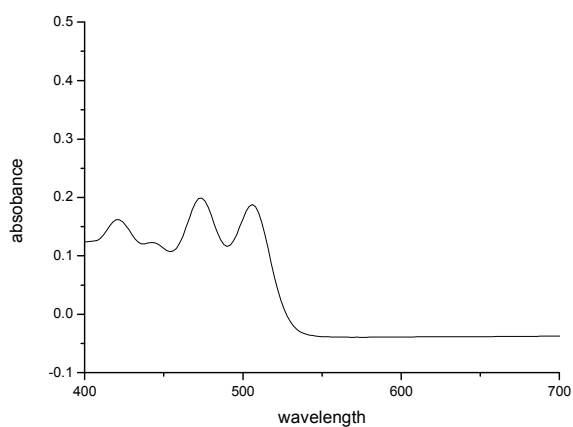
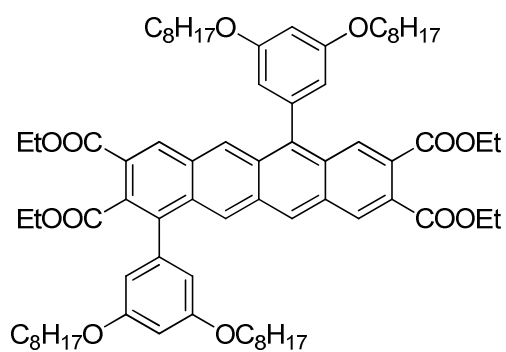
PL  $\lambda_{\text{max}} = 561 \text{ nm}$

EX WL = 446 nm

$\Phi = 42\%$



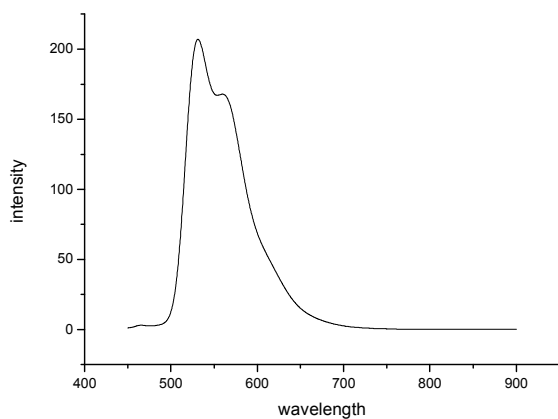
| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -1.05             | Ep <sub>1/2</sub> : -1.08 | -3.23     |
| Ep2 : -1.11             |                           |           |
| Ep3 : -1.47             | Ep <sub>1/2</sub> : -1.52 | -2.79     |
| Ep4 : -1.56             |                           |           |



UV  $\lambda_{\max} = 506 \text{ nm}$

$\varepsilon = 3159$

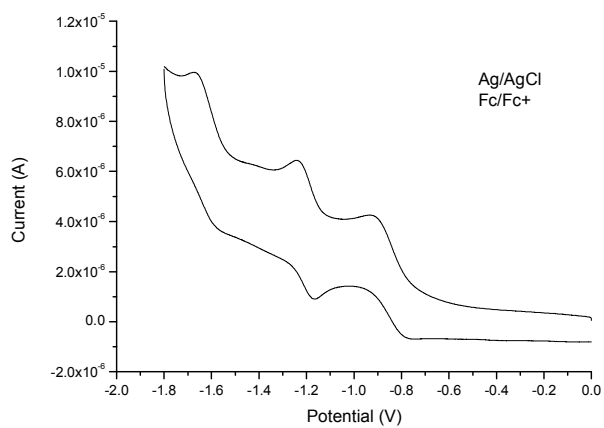
$\Delta E = 2.35 \text{ eV}$



PL  $\lambda_{\max} = 560 \text{ nm}$

EX WL = 461 nm

$\Phi = 45\%$



| Reduction Potential (V) |                           | LUMO (eV) |
|-------------------------|---------------------------|-----------|
| Ep1 : -1.16             | Ep <sub>1/2</sub> : -1.20 | -3.11     |
| Ep2 : -1.23             |                           |           |
| Ep3: -1.56              | Ep <sub>1/2</sub> : -1.61 | -2.70     |
| Ep4 : -1.66             |                           |           |