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In [1]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

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In [2]: cd "D:/Projector measurements"
```

D:\Projector measurements

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In [3]: '''Baseline correction function removes baseline absorption from an acquired s
pectrum'''
optoma_corrected=pd.read_csv('0119 behavioral setup optoma corrected.csv', sep
=';',skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row

Rhea_LGPA72G_corrected=pd.read_csv('Rhea LG PA72G OD1 corrected.csv', sep=';',
skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row

Rhea_lightcrafter_corrected=pd.read_csv('Rhea lightcrafter wratten corrected.c
sv', sep=';',skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row
```

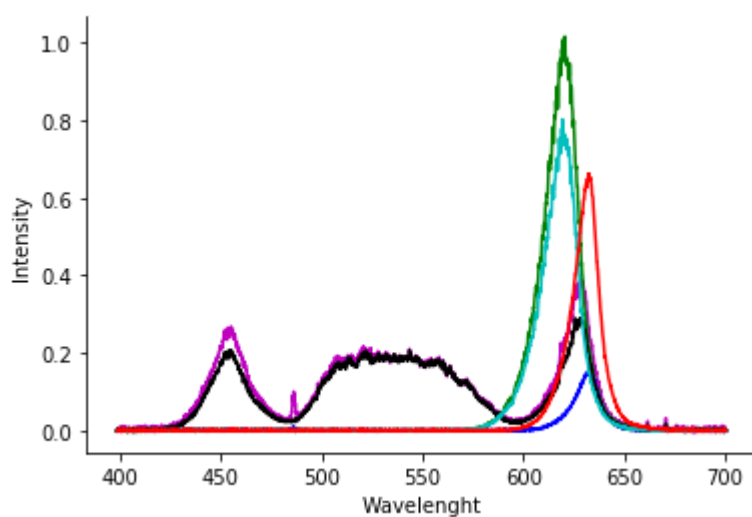
```
In [4]: optoma_uncorrected=pd.read_csv('0119 behavioral setup optoma uncorrected.csv',
sep=';',skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row

Rhea_LGPA72G_uncorrected=pd.read_csv('Rhea LG PA72G OD1 uncorrected.csv', sep=
';',skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row

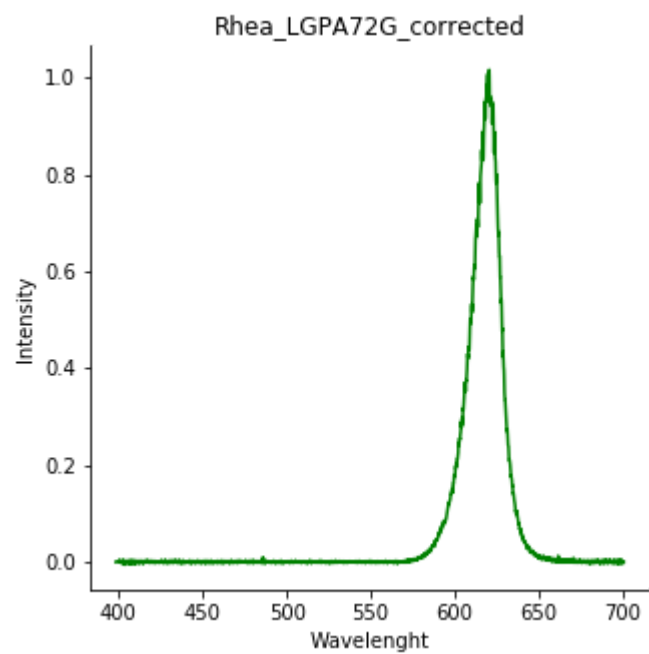
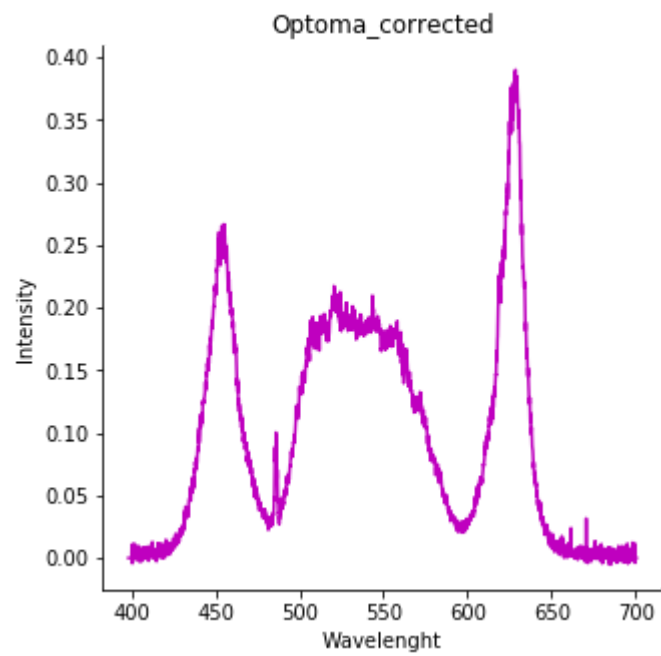
Rhea_lightcrafter_uncorrected=pd.read_csv('Rhea lightcrafter wratten uncorrect
ed.csv', sep=';',skiprows=33,
                             names=["nm","intensity"], decimal=",",skipfooter=1, engine='p
ython')#skip rows with metadata and last row
```

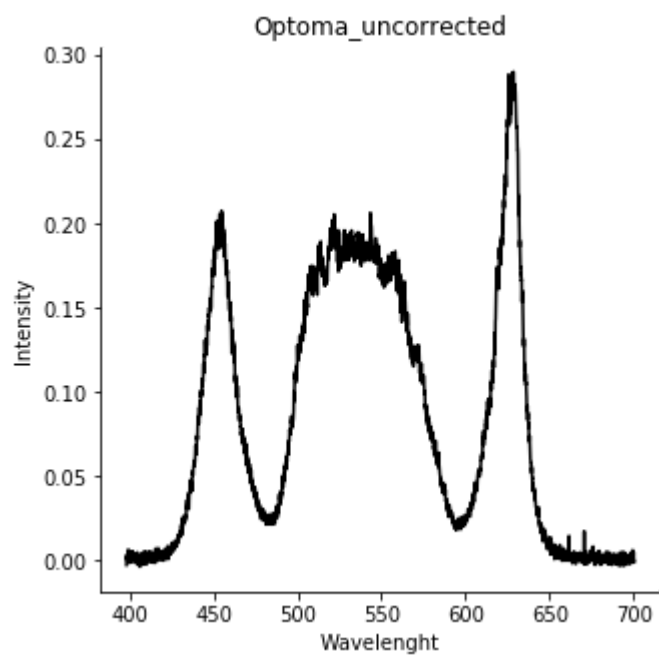
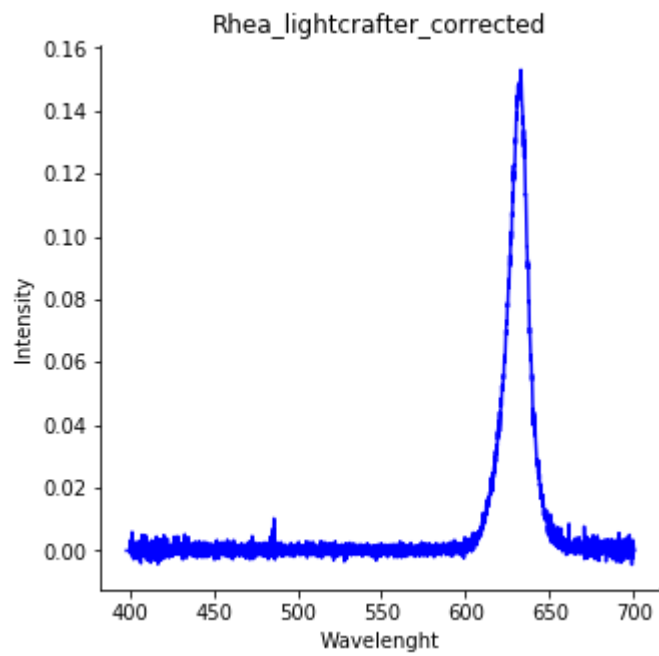
```
In [5]: projectors=[optoma_corrected,Rhea_LGPA72G_corrected,Rhea_lightcrafter_correcte
d,
                    optoma_uncorrected,Rhea_LGPA72G_uncorrected,Rhea_lightcrafter_unco
rrected]
projectors_names=[ 'Optoma_corrected', 'Rhea_LGPA72G_corrected', 'Rhea_lightcraft
er_corrected',
                   'Optoma_uncorrected', 'Rhea_LGPA72G_uncorrected', 'Rhea_lightc
rafter_uncorrected']
```

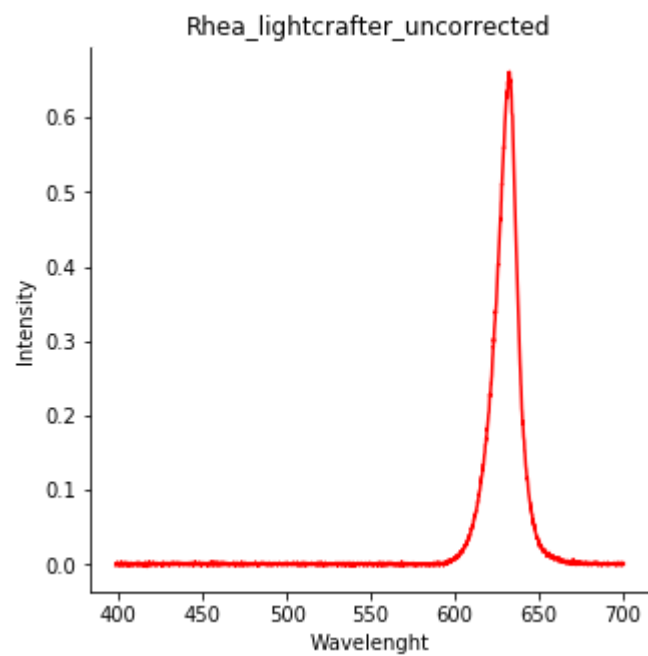
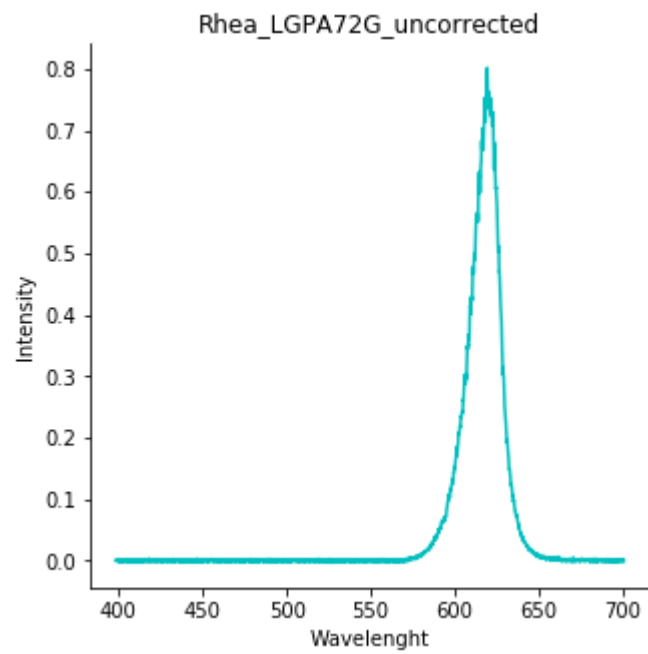
```
In [6]: count=-1
colors=['m','g','b','k','c','r']
for projector in projectors:
    count+=1
    #plt.figure(figsize=(5,5))
    plt.plot(projector.nm[700:-350],projector.intensity[700:-350], color=colors[count])
    plt.xlabel('Wavelength')
    plt.ylabel('Intensity')
    #plt.title(projectors_names[count])
    sns.despine()
```



```
In [7]: count=-1
        colors=['m','g','b','k','c','r']
        for projector in projectors:
            count+=1
            plt.figure(figsize=(5,5))
            plt.plot(projector.nm[700:-350],projector.intensity[700:-350], color=colors[count])
            plt.xlabel('Wavelength')
            plt.ylabel('Intensity')
            plt.title(projectors_names[count])
            sns.despine()
            plt.savefig(str(projectors_names[count])+'.png')
            plt.savefig(str(projectors_names[count])+'.svg')
```







In []: