

## Supplementary Material to “Pequi-Derived Carbon Dots as a Fluorescence Quenching Sensor for Sensitive Detection of Fe<sup>3+</sup> Ions”

**Table S2** – PQ-CDs percentages of chemical bonds obtained from the deconvolution of the XPS high resolution spectra.

| Sample | High resolution spectrum | Binding energy ( $\pm 1$ ev) | Contents (%) |
|--------|--------------------------|------------------------------|--------------|
| PQ-CDs | C1s                      | 283.29                       | 23.69        |
|        |                          | 284.05                       | 25.72        |
|        |                          | 284.99                       | 24.7         |
|        |                          | 286.14                       | 9.38         |
|        |                          | 287.32                       | 14.2         |
|        |                          | 291.66                       | 1.5          |
|        |                          | 294.46                       | 0.81         |
|        | N1s                      | 398.6                        | 19.34        |
|        |                          | 399.27                       | 39.63        |
|        |                          | 399.98                       | 41.03        |
|        | O1s                      | 530.42                       | 32.54        |
|        |                          | 531.27                       | 24.43        |
|        |                          | 532.23                       | 29.95        |
|        |                          | 533.44                       | 13.08        |