

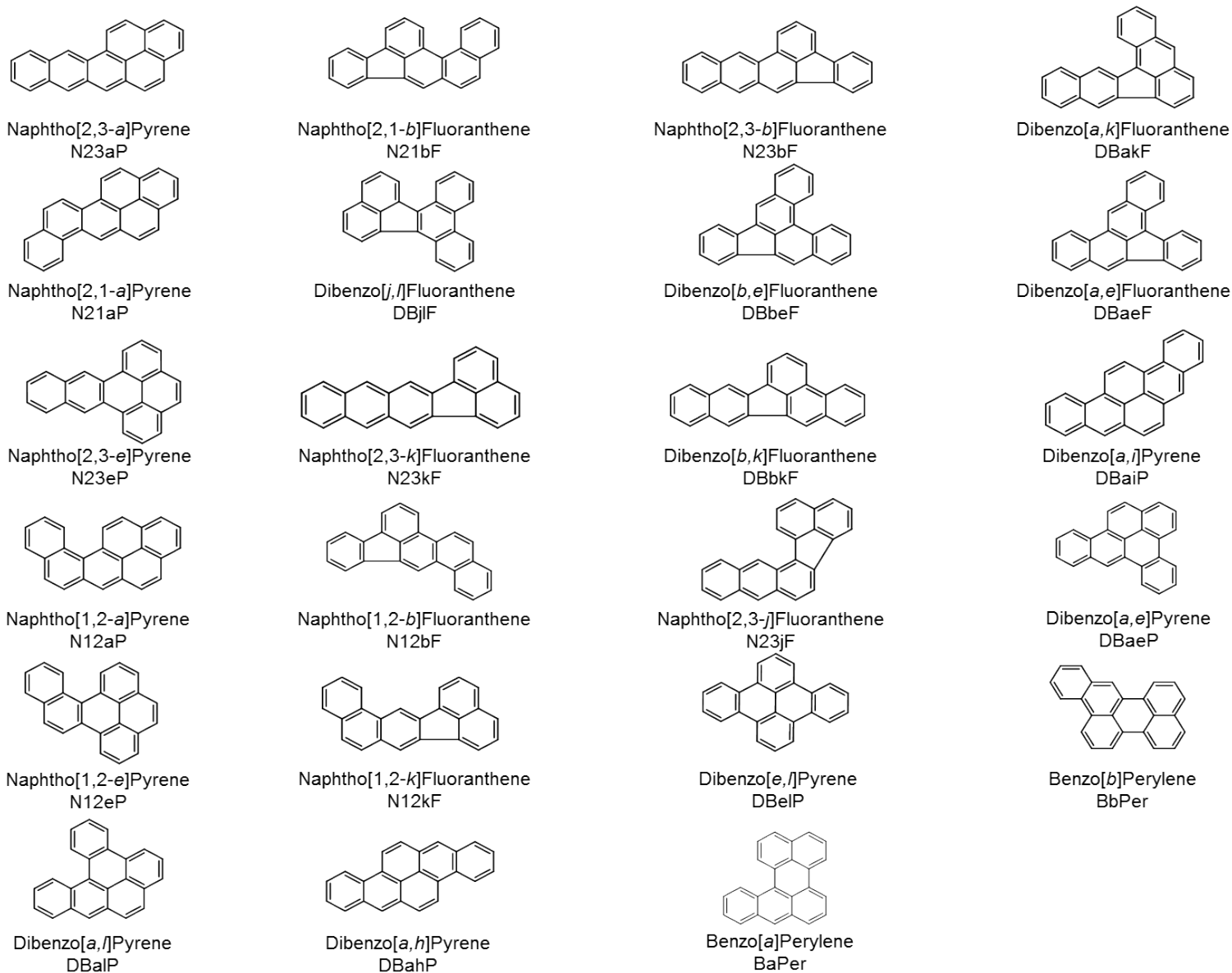
## Electronic Supplementary Material

### **Determination of polycyclic aromatic hydrocarbons with molecular mass 302 in standard reference material 1597a by reversed-phase liquid chromatography and stop-flow fluorescence detection**

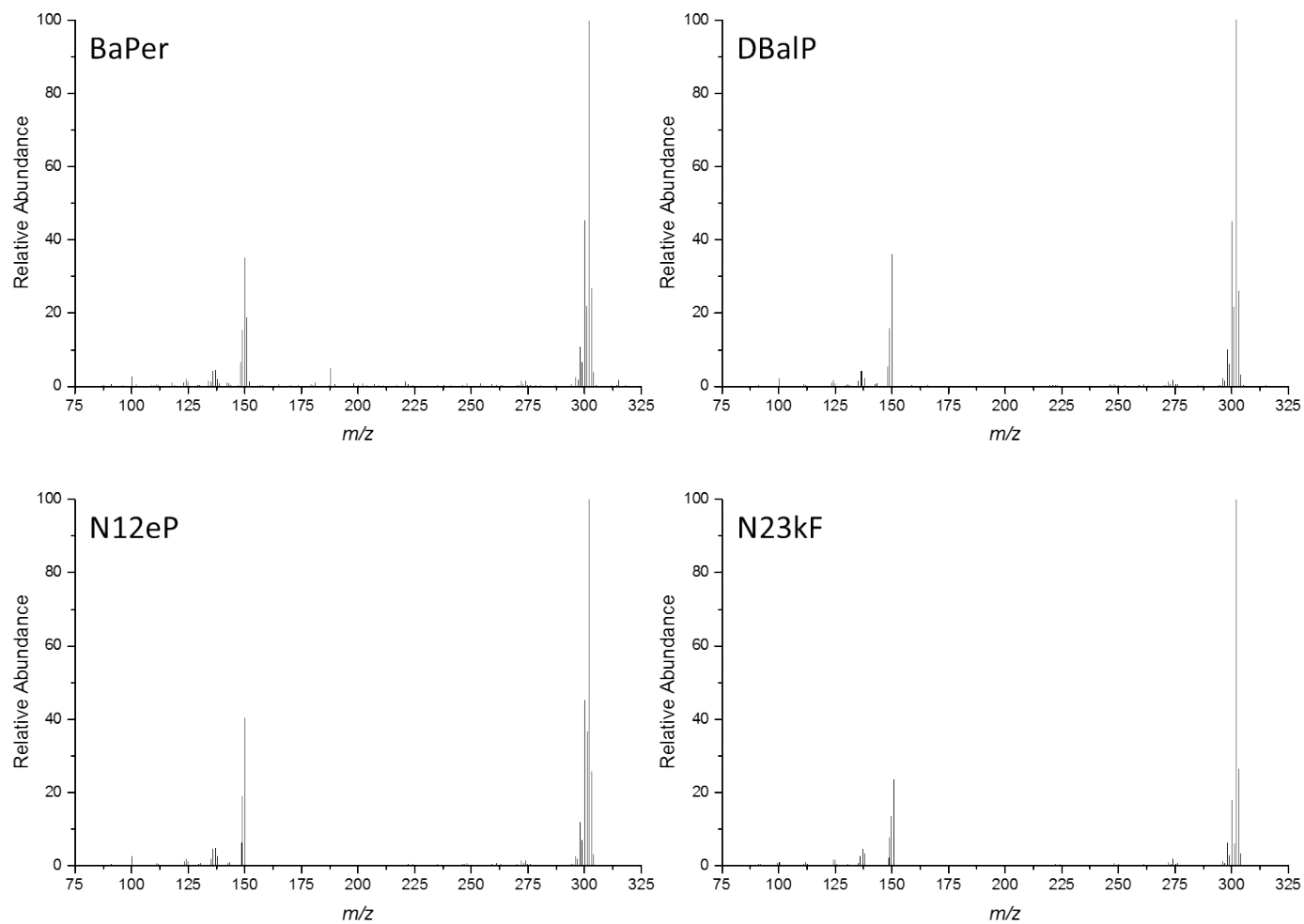
Hugh V. Hayes<sup>a</sup>, Walter B. Wilson<sup>b</sup>, Lane C. Sander<sup>b</sup>, Stephen A. Wise<sup>b</sup>, and Andres D. Campiglia<sup>a\*</sup>

<sup>a</sup> *Department of Chemistry, University of Central Florida, Orlando, Florida 32816.*

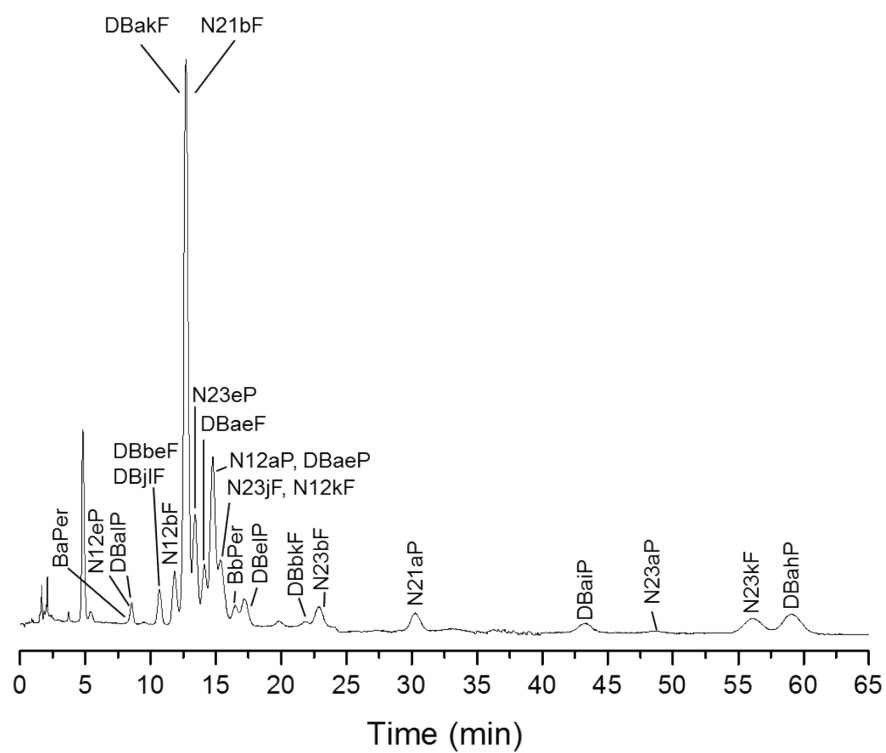
<sup>b</sup> *Chemical Sciences Division, Material Measurement Laboratory, National Institute of Standards and Technology, Gaithersburg, Maryland 20899.*



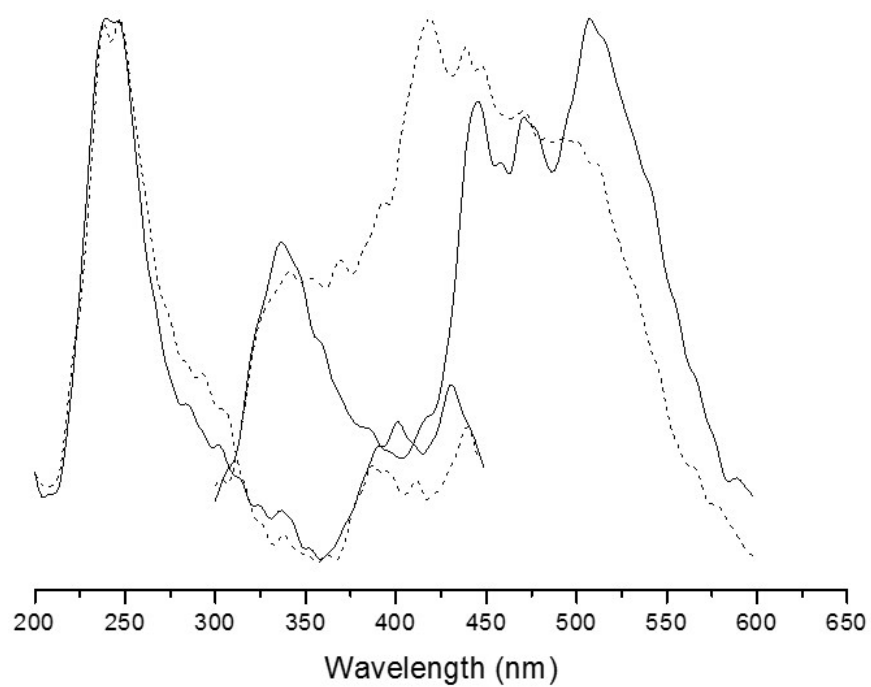
**Fig. S1** Molecular structures of the 23 MM 302 PAHs included in the present study.



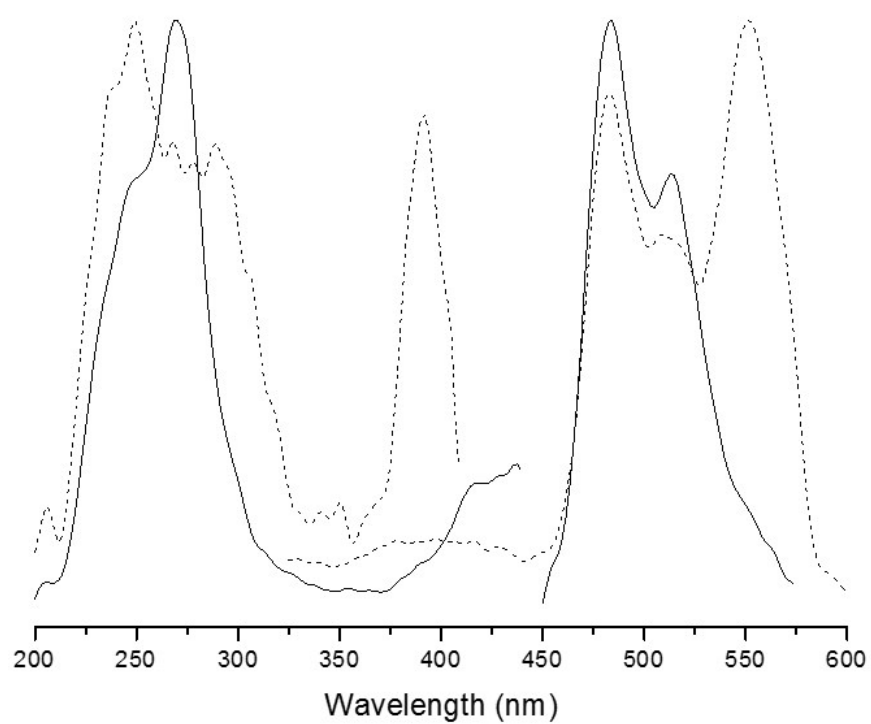
**Fig. S2** Mass spectra collected from individual reference standards for BaPer, DBaIP, N12eP, and N23kF.



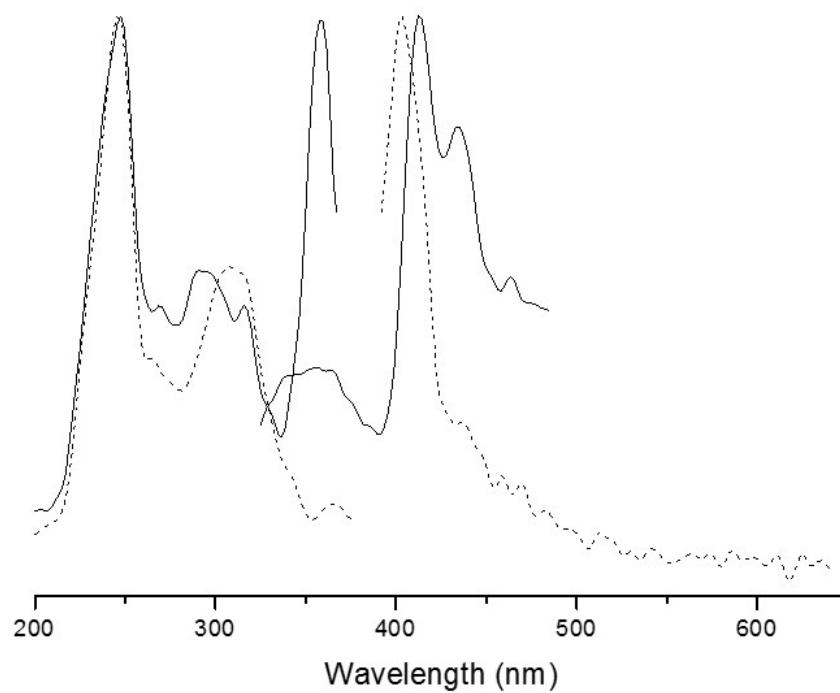
**Fig. S3** Absorbance chromatograms obtained for the 23 MM 302 PAH isomers at 254 nm.



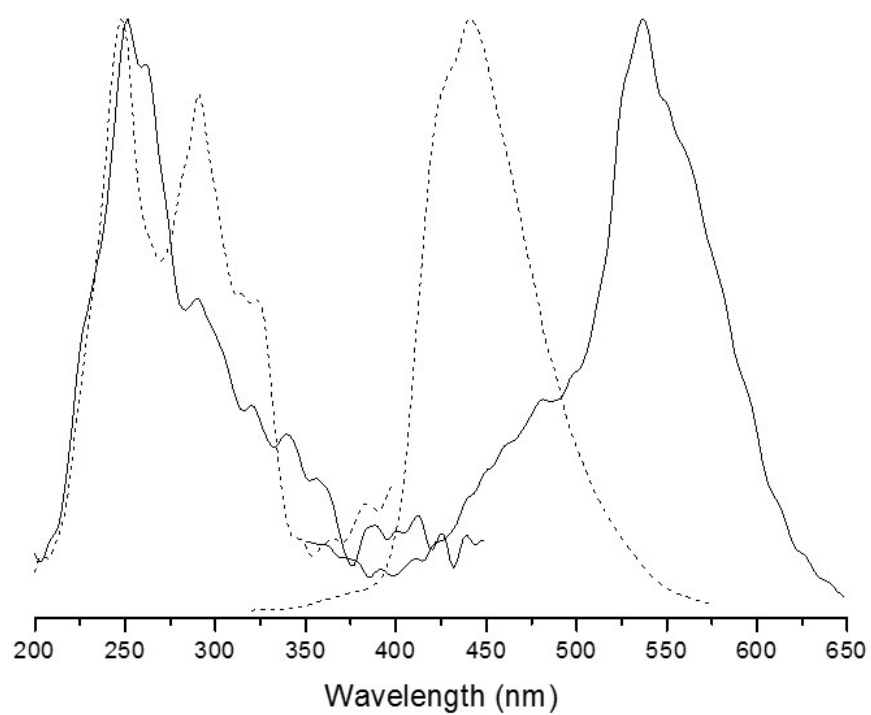
**Fig. S4** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and DBjIF reference standards (solid line).



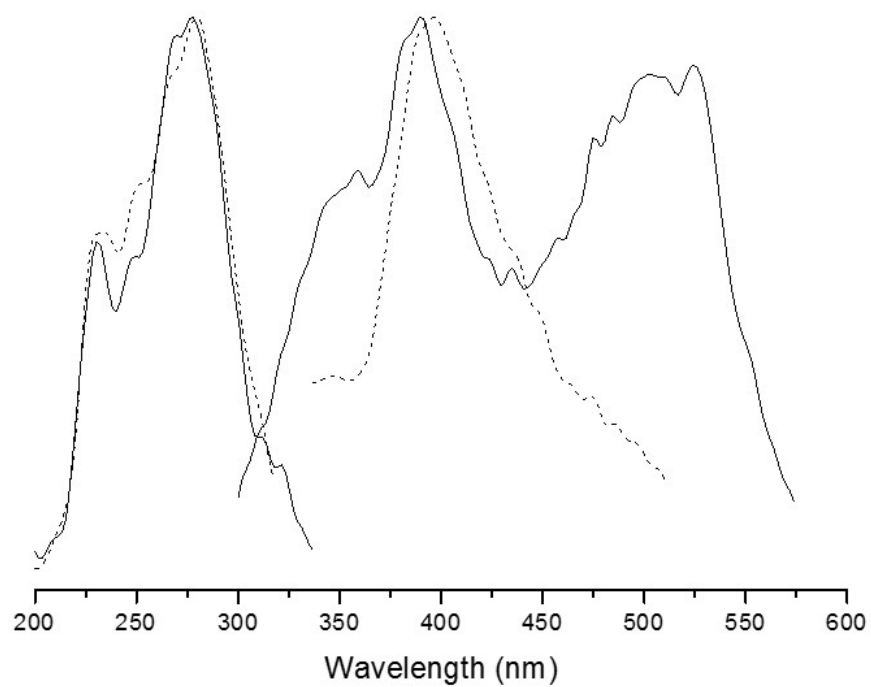
**Fig. S5** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and DBakF reference standards (solid line).



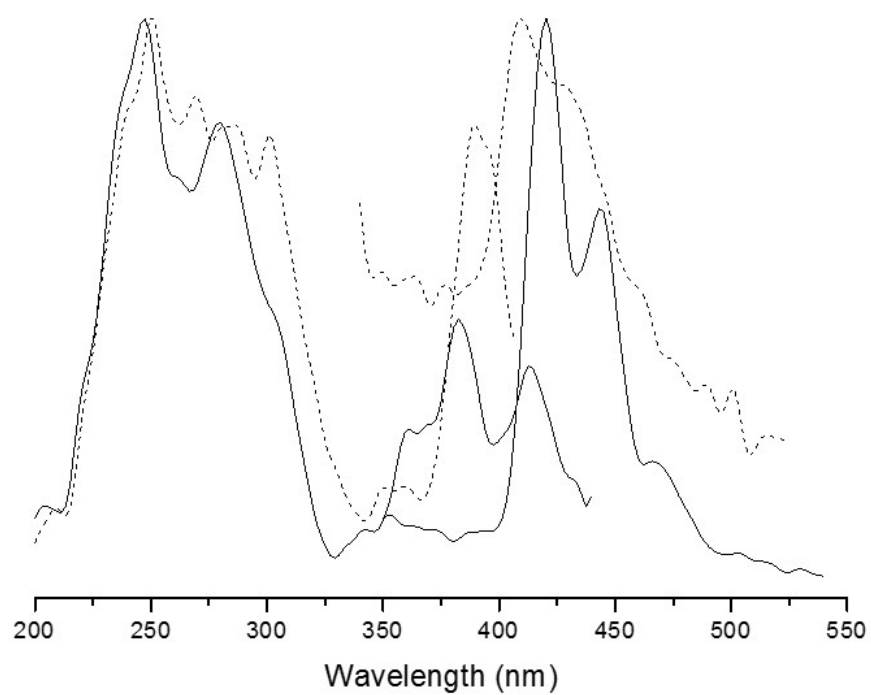
**Fig. S6** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23eP reference standards (solid line).



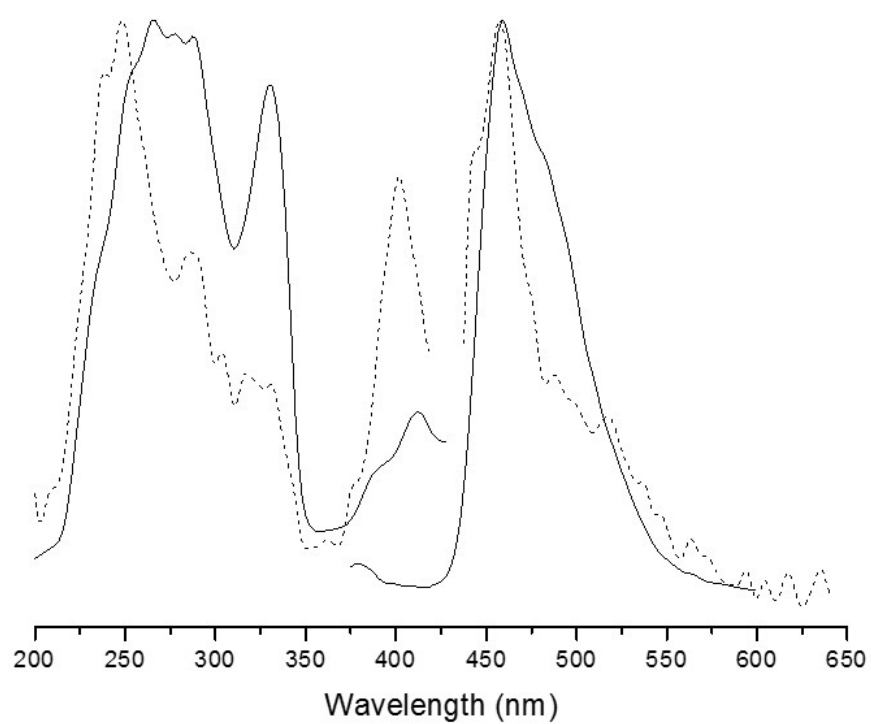
**Fig. S7** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23jF reference standards (solid line).



**Fig. S8** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and DBelP reference standards (solid line).



**Fig. S9** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N21aP reference standards (solid line).



**Fig. S10** Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23kF reference standards (solid line).