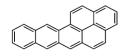
Electronic Supplementary Material

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

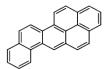
Hugh V. Hayes^a, Walter B. Wilson^b, Lane C. Sander^b, Stephen A. Wise^b, and Andres D. Campiglia^{a*}

^a Department of Chemistry, University of Central Florida, Orlando, Florida 32816.

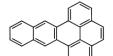
^b Chemical Sciences Division, Material Measurement Laboratory, National Institute of Standards and Technology, Gaithersburg, Maryland 20899.



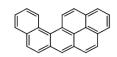
Naphtho[2,3-a]Pyrene N23aP



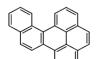
Naphtho[2,1-a]Pyrene N21aP



Naphtho[2,3-*e*]Pyrene N23eP



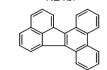
Naphtho[1,2-a]Pyrene N12aP



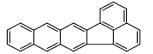
Naphtho[1,2-e]Pyrene N12eP



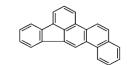
Naphtho[2,1-b]Fluoranthene N21bF



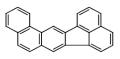
Dibenzo[j, /]Fluoranthene DBilF



Naphtho[2,3-k]Fluoranthene N23kF



Naphtho[1,2-b]Fluoranthene N12bF



Naphtho[1,2-k]Fluoranthene N12kF

Dibenzo[a,/]Pyrene DBalP

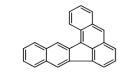
Dibenzo[a,h]Pyrene DBahP

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

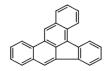


Benzo[a]Perylene

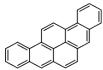
BaPer



Dibenzo[a,k]Fluoranthene DBakF



Dibenzo[a,e]Fluoranthene DBaeF



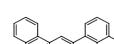
Dibenzo[a,i]Pyrene DBaiP



Dibenzo[a,e]Pyrene DBaeP



Benzo[b]Perylene BbPer



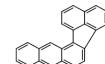
Dibenzo[b,k]Fluoranthene DBbkF

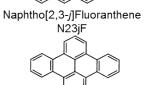
Naphtho[2,3-b]Fluoranthene

N23bF

Dibenzo[b,e]Fluoranthene

DBbeF





Dibenzo[e,/]Pyrene

DBelP

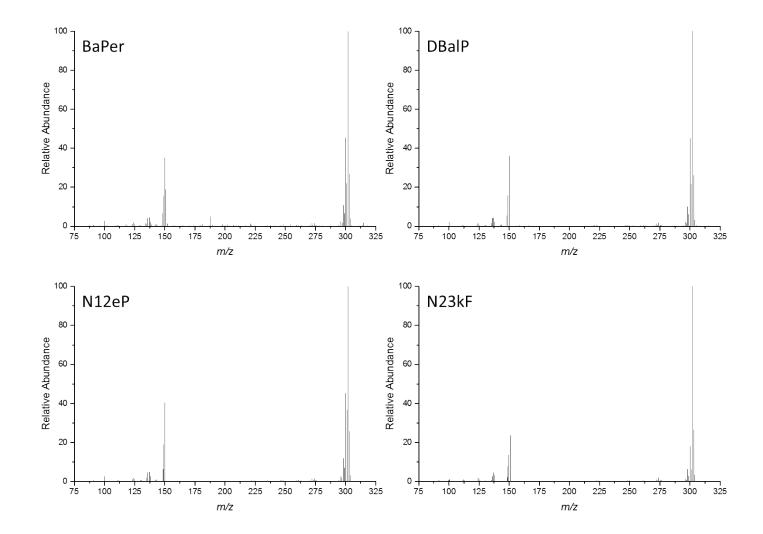


Fig. S2 Mass spectra collected from individual reference standards for BaPer, DBalP, N12eP, and N23kF.

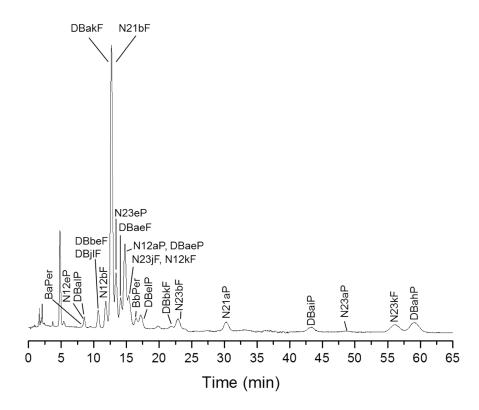


Fig. S3 Absorbance chromatograms obtained for the 23 MM 302 PAH isomers at 254 nm.

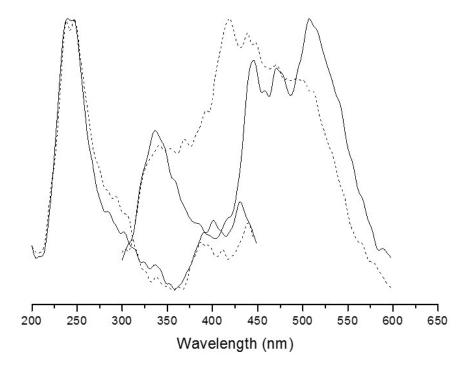


Fig. S4 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and DBjlF reference standards (solid line).

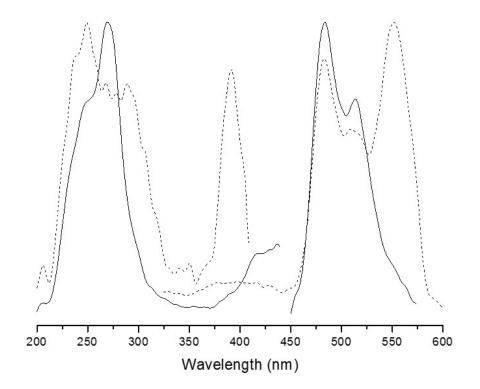


Fig. S5 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and
DBakFreferencestandards(solidline).

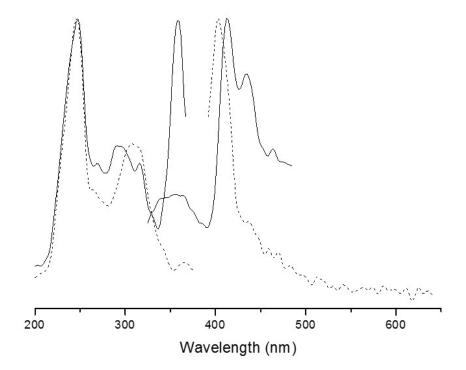


Fig. S6 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23eP reference standards (solid line).

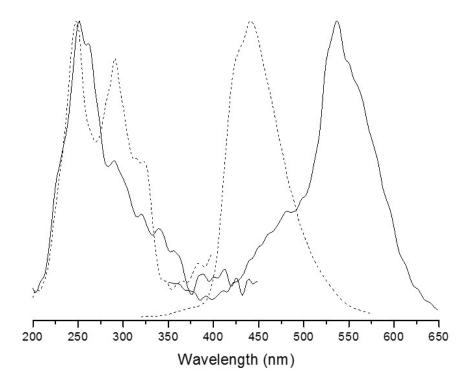


Fig. S7 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23jF reference standards (solid line).

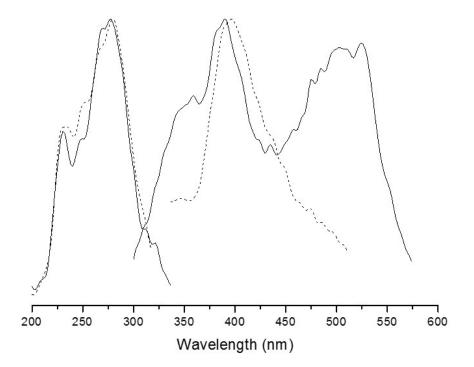


Fig. S8 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and DBelP reference standards (solid line).

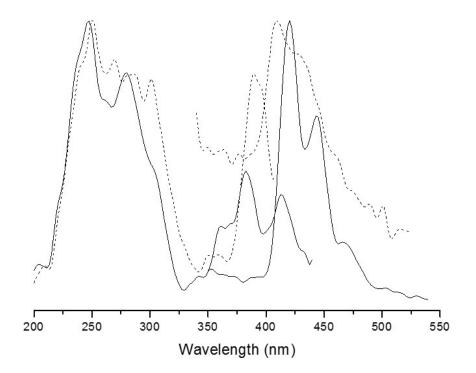


Fig. S9 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N21aP reference standards (solid line).

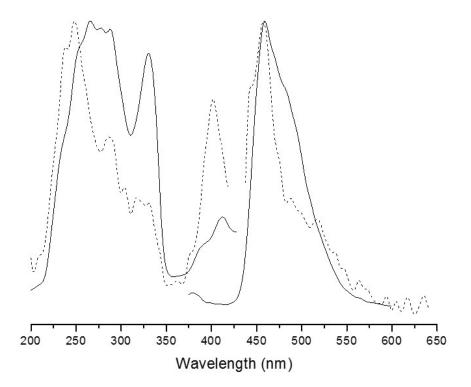


Fig. S10 Excitation and emission spectra collected from fraction 12 of SRM 1597a (dash line) and N23kF reference standards (solid line).