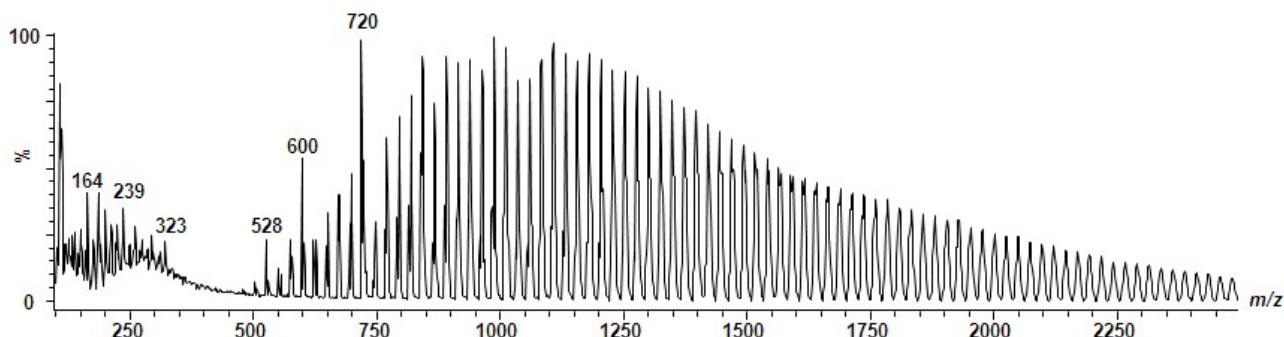


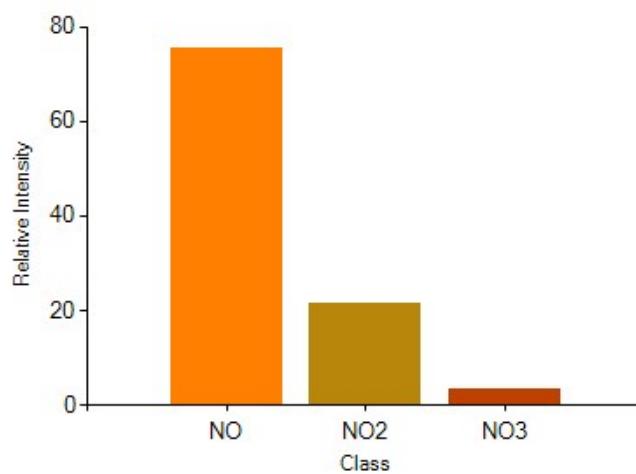
Support Information

**Fullerenes in asphaltenes and other carbonaceous materials: natural constituents or laser artefacts?**

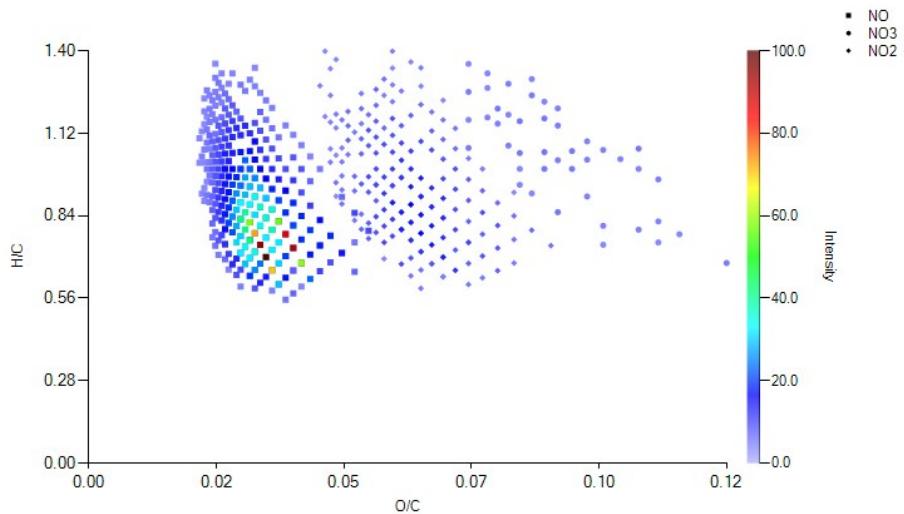
Vanessa G. Santos,<sup>a\*</sup> Maíra Fasciotti,<sup>a</sup> Marcos A. Pudenzi,<sup>a</sup> Heliara L. Nascimento,<sup>a</sup> Clécio F. Klitzke,<sup>a</sup> Rosana C. L. Pereira,<sup>b</sup> Wagner L. Bastos<sup>b</sup>, Richard N. Zare<sup>c\*</sup> and Marcos N. Eberlin<sup>b\*</sup>



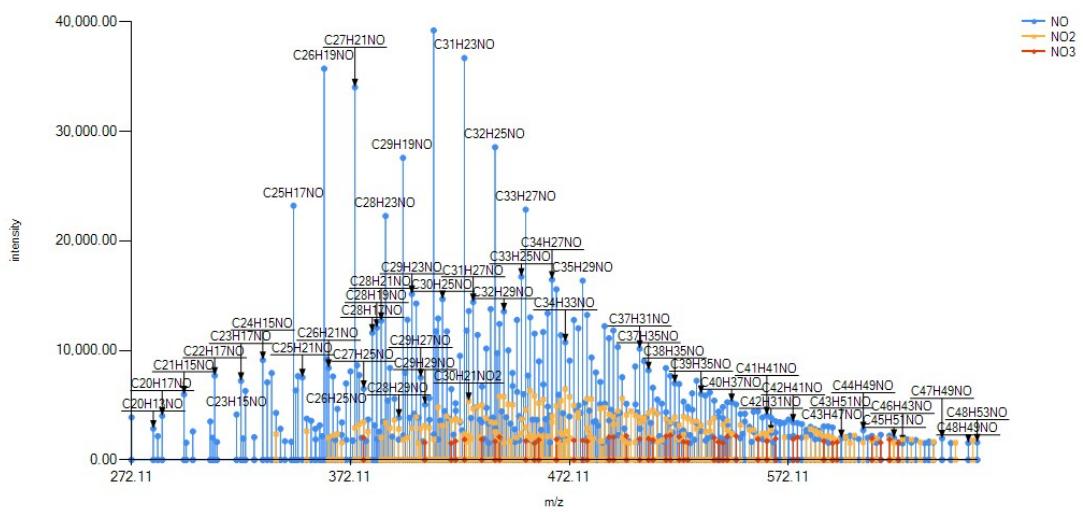
**Figure S1.** LDI-MS mass spectrum in the mass range of  $m/z$  200 to 2500 of a typical asphaltene sample.



**Figure S2.** Class distribution in % of an example of asphaltene sample in APPI(-).



**Figure S3.** Van Krevelen graph for the main classes of heteroatoms in the asphaltene sample in APPI(-).



**Figure S4.** APPI(-) mass spectrum of an asphaltene sample with the unabiguous molecular formula attribuition of the main detected signals.