



Publications

Compositional trends for total vanadium content and vanadyl porphyrins in gel permeation chromatography fractions reveal correlations between asphaltene aggregation and ion production efficiency in atmospheric pressure photoionization – Martha L. Chacón-Patiño, Rémi Moulian, Caroline Barrère-Mangote, Jonathan C. Putman, Chad R. Weisbrod, Greg T. Blakney, Brice Bouyssiere, Ryan P. Rodgers, Pierre Giusti – **Energy & Fuels**, 2020, 34 (12), pp.16158–16172, DOI: [10.1021/acs.energyfuels.0c03349](https://doi.org/10.1021/acs.energyfuels.0c03349)

Chemical Characterization Using Different Analytical Techniques to Understand Processes: The Case of the Paraffinic Base Oil Production Line – Rémi Moulian, Johann Le Maître, Hélène Leroy, Ryan Rodgers, Brice Bouyssiere, Carlos Afonso, Pierre Giusti, Caroline Barrère-Mangote – **Processes**, 2020, 8 (11), pp.1472, DOI: [10.3390/pr8111472](https://doi.org/10.3390/pr8111472)

Speciation of Metals in Asphaltenes by High-Performance Thin-Layer Chromatography and Solid-Liquid Extraction Hyphenated with Elemental and Molecular Identification – Rémi Moulian, Martha Chacón-Patiño, Oscar Lacroix-Andrivet, Sandra Mounicou, Anna Luiza Mendes-Siqueira, Carlos Afonso, Ryan Rodgers, Pierre Giusti, Brice Bouyssiere, Caroline Barrère-Mangote – **Energy and Fuels**, 2020, 34 (10), pp.12449–12456, DOI: [10.1021/acs.energyfuels.0c02525](https://doi.org/10.1021/acs.energyfuels.0c02525)

Probing Aggregation Tendencies in Asphaltenes by Gel Permeation Chromatography. Part 2: Online Detection by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry and Inductively Coupled Plasma Mass Spectrometry – Jonathan C. Putman, Rémi Moulian, Donald F. Smith, Chad R. Weisbrod, Martha L. Chacón-Patiño, Yuri E. Corilo, Greg T. Blakney, Leah E. Rumancik, Caroline Barrère-Mangote, Ryan P. Rodgers, Pierre Giusti, Alan G. Marshall, Brice Bouyssiere – **Energy and Fuels**, 2020, 34 (9), pp.10915–10925, DOI: [10.1021/acs.energyfuels.0c02158](https://doi.org/10.1021/acs.energyfuels.0c02158)

Probing Aggregation Tendencies in Asphaltenes by Gel Permeation Chromatography. Part 1: Online Inductively Coupled Plasma Mass Spectrometry and Offline Fourier Transform Ion Cyclotron Resonance Mass Spectrometry – Jonathan C. Putman, Rémi Moulian, Caroline Barrère-Mangote, Ryan P. Rodgers, Brice Bouyssiere, Pierre Giusti, Alan G. Marshall – **Energy and Fuels**, 2020, 34 (7), pp.8308–8315, DOI: [10.1021/acs.energyfuels.0c01522](https://doi.org/10.1021/acs.energyfuels.0c01522)

Analysis of Petroleum Products by Gel Permeation Chromatography Coupled Online with Inductively Coupled Plasma Mass Spectrometry and Offline with Fourier Transform Ion Cyclotron Resonance Mass Spectrometry, – J. Putman, S. Gutierrez Sama, C. Barrère-Mangote, R. Rodgers, R. Lobinski, A. Marshall, B. Bouyssiere, P. Giusti – **Energy and Fuels**, 2018, 32 (12), pp.12198–12204, DOI: [10.1021/acs.energyfuels.8b02788](https://doi.org/10.1021/acs.energyfuels.8b02788)