
Supporting Information for

**Cracking Behavior of Heavy Petroleum Polar Species in
Collision Induced Dissociation and Thermal Visbreaking**

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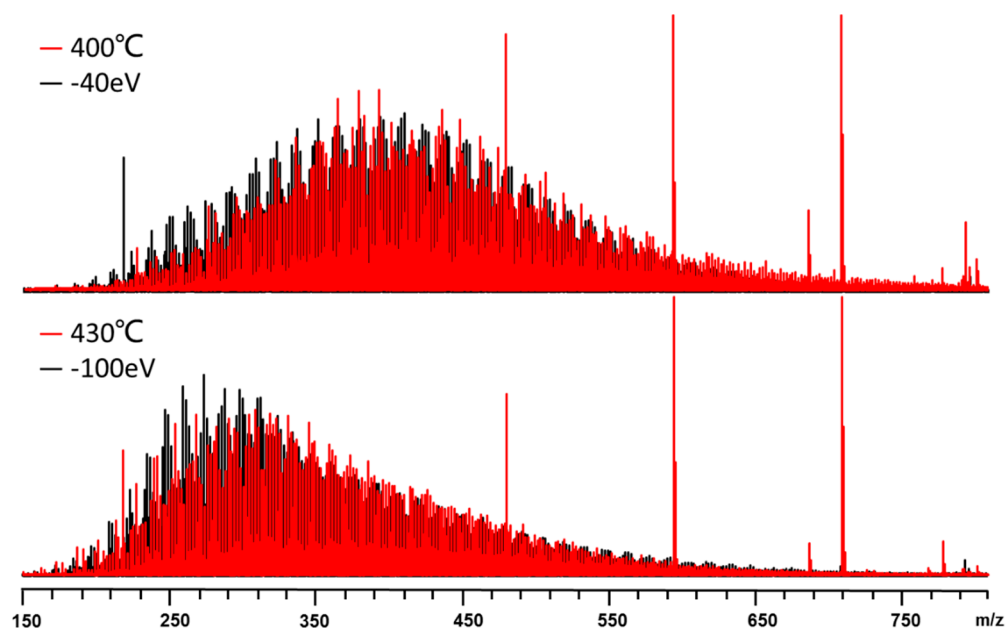


Fig. S1 Overlapped +ESI FT-ICR mass spectra of Venezuela VR thermal reaction products and CID products

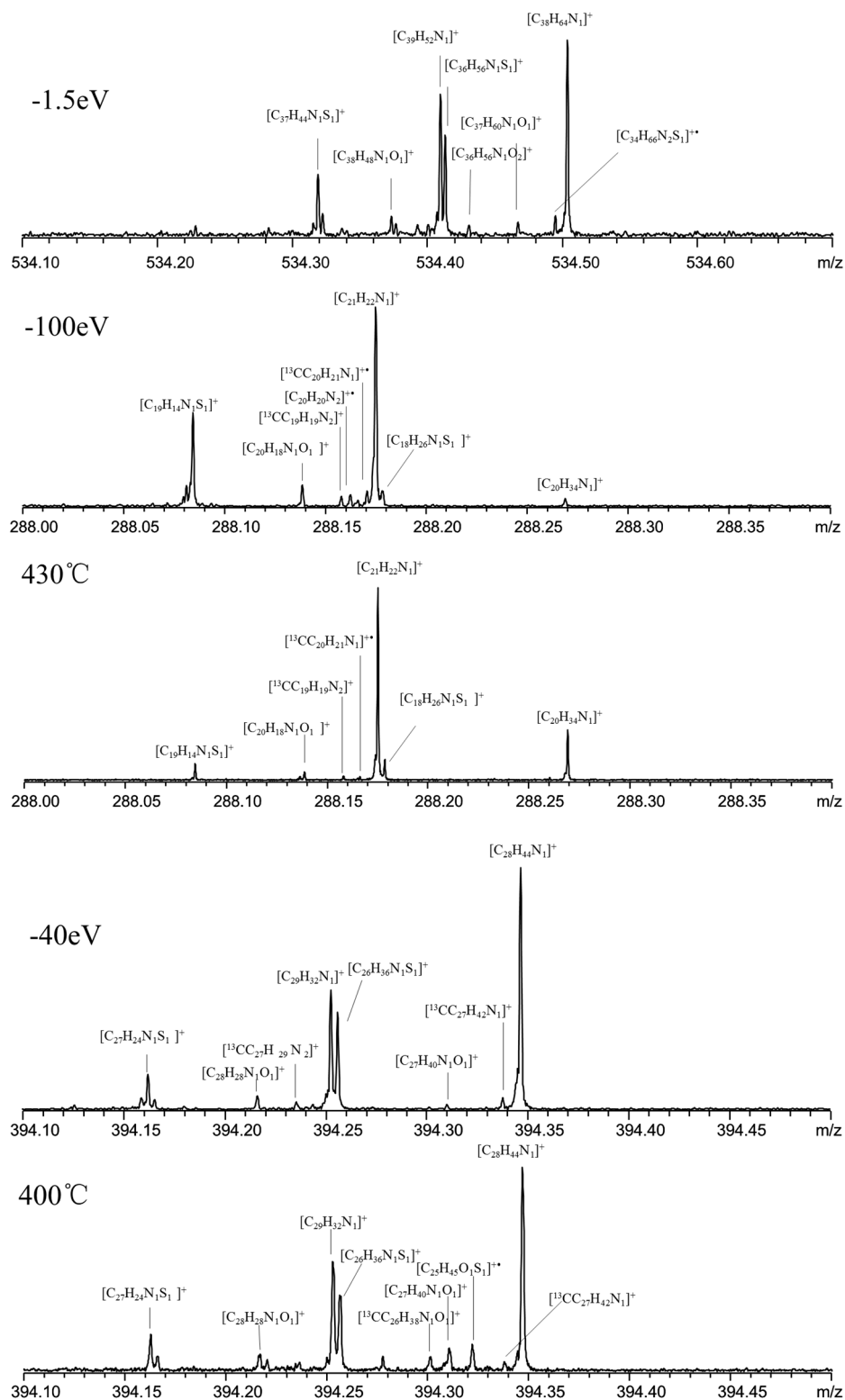


Fig. S2 Expanded +ESI FT-ICR mass spectra of Venezuela VR thermal reaction products and CID products

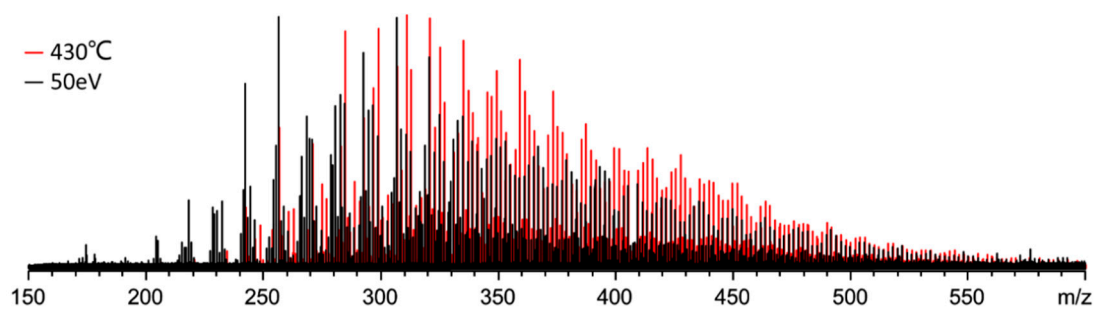


Fig. S3 Overlapped -ESI FT-ICR mass spectra of Venezuela VR thermal reaction products and CID products

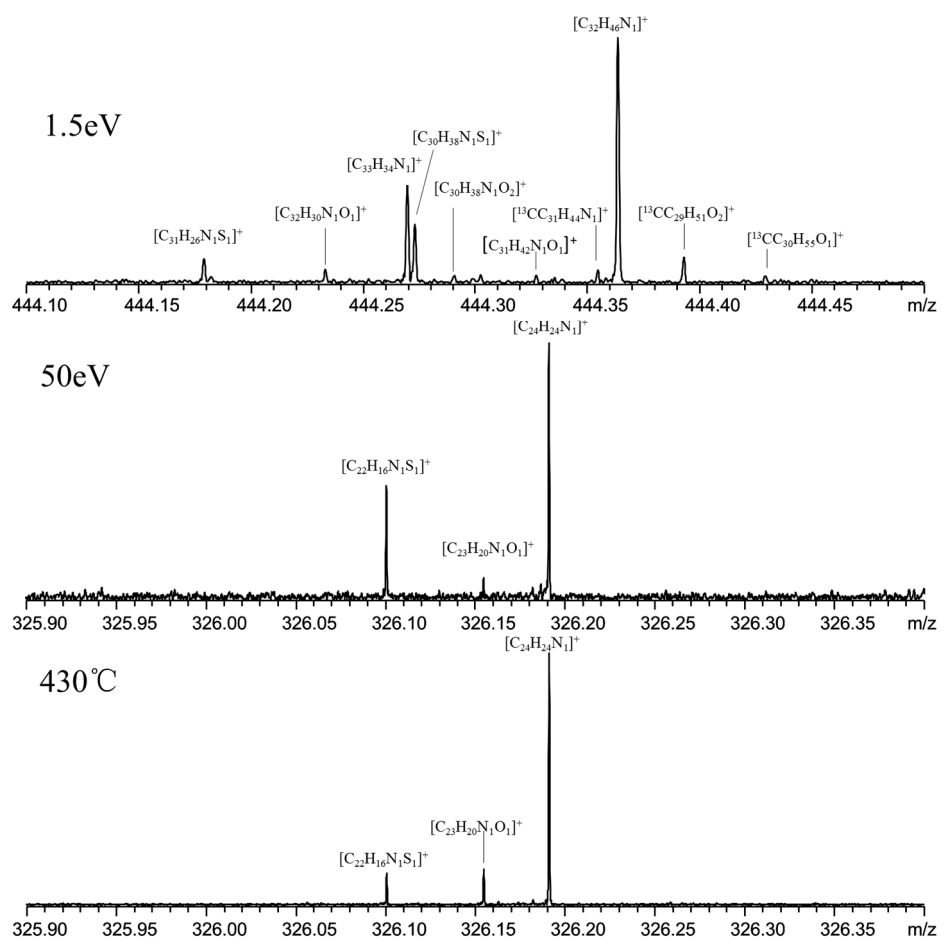


Fig. S4 Expanded -ESI FT-ICR mass spectra of Venezuela VR thermal reaction products and CID products

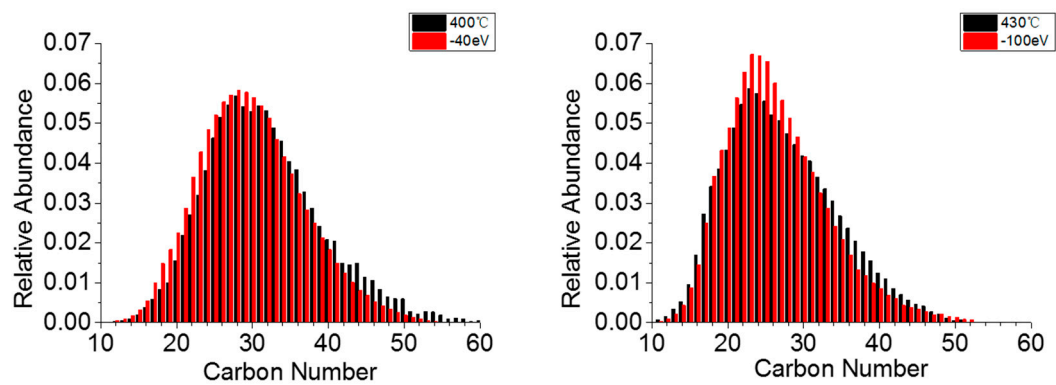


Fig. S5 Overlapped carbon number distribution in +ESI FT-ICR mass spectra of Venezuela VR thermal reaction products and CID products