

Hoekstra Research Report 12

Catalyst testing for FCC gasoline desulfurizationrequest for participation

Hoekstra Trading LLC will sponsor a catalyst testing program on FCC gasoline desulfurization catalysts during the summer of 2022. The tests will be done by Avantium Catalysis on their high-throughput catalyst testing platform using our standard gasoline desulfurization catalyst test protocol which is a 12 day test at 3 temperatures.

Excellent new catalysts are available for this service. We will compare and rank 13 commercially-available catalyst samples based on desulfurization activity and octane/sulfur selectivity when desulfurizing a full-range FCC naphtha to a range of 10-100 ppm product sulfur. There will be 3 replicate samples of a reference catalyst for 16 catalysts total.

This program will enable you to confidently buy better catalysts at better prices for your FCC gasoline desulfurizers in the future.

We have established a 40% discount for refiners who commit by June 15 to purchase the test results to be released September 30, 2022. The discounted price is \$30,000 for refiners under 1 million barrels/day corporate capacity and \$45,000 for refiners over 1 million barrels/day corporate capacity. Payment will be due October 30, 2022. Please secure your discount by issuing a purchase order by June 15, 2022. A sample invoice is attached with all the information needed to issue a purchase order.

Thank you.

George Hoekstra Phone: +1 630 330 8159 E-mail: george.hoekstra@hoekstratrading.com

SAMPLE INVOICE



Hoekstra Trading LLC

DATE: SAMPLE INVOICE NUMBER: SAMPLE

421 Janes Ave. Unit 102, Bolingbrook IL. 60440 Phone +1 630 330 8159 <u>George.hoekstra@hoekstratrading.com</u> PNC Bank of Ohio ABA number 071921891 account number **4712186382** swift code pnccus33 EIN 26-3221486

то:		
Payment terms	Due date	
30 days from invoice	Oct. 30, 2022	

quantity	description	unit price USD	line total USD
	Purchase order number		
	Hoekstra Research Report 12		
1	Catalyst test report/ranking	\$30,000	\$30,000
1	on site presentation and consultation	No charge	No charge
1	3 months unlimited consultation by phone and E-mail	No charge	No charge
		Total	\$30,000