

# Industrial Research in Refining Catalysis at Phillips 66

Phillips 66 is a worldwide energy manufacturing and logistics company with an integrated portfolio including segments in Midstream, Chemicals, Marketing and Refining. The refining business processes over 2.2 million barrels per day of crude oil, and supplies about 11% of the motor fuels in the United States. Most of our refining units are catalytic processes, used to convert crude oil into finished products such as gasoline, diesel and jet fuel.

Phillips 66 R&D continues to be an industry leader in refining catalysis research. This presentation describes some of the drivers for the current Phillips 66 R&D catalysis research, including crude oil selection, fuel economy standards and fuel quality regulations. The R&D research strategy will be discussed, along with some of the laboratory and pilot plant equipment and recent results.

**8:30 a.m. Thursday  
February 21, 2019**

**CEBC Seminar Room, B104  
Building B, 1501 Wakarusa Drive,  
Lawrence, KS**



## CEBC Industry Colloquium

**Dr. Byron Johnson**

Senior Principal Engineer

Phillips 66  
Bartlesville, OK



### About the presenter

*Byron Johnson received B.S. and M.S. degrees at the University of Utah and a PhD degree at Brigham Young University, all in Chemical Engineering. In 1989 Byron joined Phillips R&D in Bartlesville, Oklahoma. During his 29 years with the company, he has spent a total of 21 years in R&D, 3 years at the Borger refinery, and 5 years in Refining Technical Services. His technical background is primarily in hydroprocessing catalysis and refinery operations. Byron has served as the Manager of various R&D divisions, including Refining Research, Sustainability, and Site Operations. He is currently serving as a Senior Principal Engineer on the R&D Technical Ladder.*

The Center for Environmentally Beneficial Catalysis (CEBC) at the University of Kansas and its partners are developing green technologies to help the chemical industry prevent waste and conserve the earth's natural resources.

[www.cebc.ku.edu](http://www.cebc.ku.edu)



Center for Environmentally  
Beneficial Catalysis