100 Years of Petroleum Refining Catalysts

E. Thomas Habib, Jr.
Grace Davison Refining Technologies
7500 Grace Drive, Columbia, MD 21044

100 years ago in 1908, Henry Ford introduced the Model T Ford and ushered in the age when cars were affordable to middle class Americans. At that time petroleum refining consisted primarily of distillation only, and the amount of gasoline required to fuel a large number of automobiles was simply not available. However, a major change was on the horizon for petroleum refining – the widespread use of catalytic processing to greatly improve the yield of fuels. Without these new catalytic processes, the age of the automobile would not have been possible. This presentation briefly reviews the basic catalysts and their historical improvements for the five most important catalytic refining processes: hydroprocessing (hydrotreating and hydrocracking), cracking, isomerization, alkylation, and reforming.

Abstract ID#:
Password:
Session Selection: