



Characterization of Catalyst Materials for Production of Aerospace Fuels

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BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 24 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Due to environmental, economic, and security issues, there is a greater need for cleaner alternative fuels. There will undoubtedly be a shift from crude oil to nonpetroleum sources as a feedstock for aviation (and other transportation) fuels. Additionally, efforts are concentrated on reducing costs coupled with fuel production from nonconventional sources. One solution to this issue is Fischer-Tropsch gas-to-liquid technology. Fischer-Tropsch processing of synthesis gas (COH2) produces a complex product stream of paraffins, olefins, and oxygenated compounds such as alcohols and aldehydes. The Fisher-Tropsch process can produce a cleaner diesel oil fraction with a high cetane number (typically above 70) without any sulfur or aromatic compounds. This process is most commonly catalyzed by heterogeneous (in this case, silver and platinum) catalysts composed of cobalt supported on alumina or unsupported alloyed iron powders. Physisorption, chemisorptions, scanning electron microscopy (SEM), and energy dispersive spectroscopy (EDS) are described to better understand the potential performance of Fischer-Tropsch cobalt on alumina catalysts promoted with silver and platinum. The overall goal is to preferentially produce C8 to C18 paraffin compounds for use as aerospace fuels. Progress towards...



Reviews

It is an awesome publication which i actually have ever read through. it had been writtern really properly and valuable. I found out this book from my i and dad recommended this pdf to discover. -- Doyle Schmeler

This book is definitely not simple to begin on studying but quite fun to see. I actually have read and that i am sure that i will gonna read through yet again once again in the foreseeable future. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Brennan Koelpin