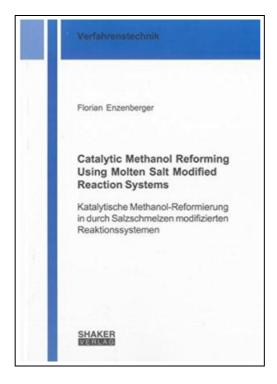
## Catalytic Methanol Reforming Using Molten Salt Modified Reaction Systems



Filesize: 8.49 MB

## Reviews

I actually started out reading this article publication. It is loaded with knowledge and wisdom Your way of life span is going to be transform as soon as you total reading this article pdf.

(Mrs. Felicia Windler)

## CATALYTIC METHANOL REFORMING USING MOLTEN SALT MODIFIED REACTION SYSTEMS



Shaker Verlag Okt 2012, 2012. Taschenbuch. Condition: Neu. Neuware - The aim of this work was the development of novel catalytic concepts based on molten salts for hydrogen production from methanol. As methanol represents a potential energy carrier for the convenient storage of hydrogen, the optimization of catalytic systems for hydrogen generation from methanol is of particular interest. In the first part, the influence of alkali acetates on liquid phase reforming of methanol and water was investigated in a continuous stirred tank reactor. Good activities and a low content of by-products methane and carbon monoxide were achieved using a heterogeneous platinum/palladium catalyst. However, it was assumed that the kinetics is affected by the vapor liquid equilibrium of methanol and water. Therefore, the reaction system used for liquid phase reforming was considered unsuitable for the characterization and development of catalysts. In a second approach, the concept of molten salt modified catalysis was transferred from liquid phase reforming to gas phase steam reforming of methanol using a fixed-bed reactor. Heterogeneous Pt and Pt/Pd catalysts were coated by a thin film of alkali acetate salt according to the concept of Solid Catalyst with lonic Liquid Layer (SCILL). Thereby the activity could be increased by a factor of up to 6 compared to the uncoated catalyst. The salt showed also a tremendous impact on the CO2 selectivity. The stability of the catalyst was demonstrated by a long-term experiment for about 500 hours time on stream. Upon coating with a less hygroscopic and less basic salt, the increase in activity and selectivity was less pronounced. In a first interpretation the positive effect of the molten salt coating was attributed to an increased substrate concentration at the active center as well as a promotion of the water gas shift reaction by a basic environment. Additionally, there...



Read Catalytic Methanol Reforming Using Molten Salt Modified Reaction Systems Online

Download PDF Catalytic Methanol Reforming Using Molten Salt Modified Reaction Systems

## You May Also Like



# Learn em Good: Improve Your Child s Math Skills: Simple and Effective Ways to Become Your Child s Free Tutor Without Opening a Textbook

Createspace, United States, 2010. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. From a certified teacher and founder of an online tutoring website-a simple and...

Save eBook

>>



## Comic Maths: Sue: Fantasy-Based Learning for 4, 5 and 6 Year Olds

The Captain Papadopoulos Publishing Company, United Kingdom, 2012. Paperback. Book Condition: New. Brian Williamson (illustrator). 276 x 214 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Comic Maths: Sue (Key Stage 1,...

Save eBook

>>



#### Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to...

Save eBook

**»** 



## Kingfisher Readers: Where Animals Live (Level 2: Beginning to Read Alone)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: Where Animals Live (Level 2: Beginning to Read Alone), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to the...

Save eBook

**>>** 



## Kingfisher Readers: Your Body (Level 2: Beginning to Read Alone) (Unabridged)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: Your Body (Level 2: Beginning to Read Alone) (Unabridged), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to the...

Save eBook

**,** 



## Read Write Inc. Phonics: Green Set 1 Non-Fiction 3 Let s Go!

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 215 x 88 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

Save Document

>>



#### Read Write Inc. Phonics: Blue Set 6 Non-Fiction 2 How to Make a Peach Treat

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 205 x 74 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

Save Document

\*



## New KS2 English SAT Buster 10-Minute Tests: Grammar, Punctuation & Spelling (2016 SATs & Beyond)

Coordination Group Publications Ltd (CGP). Paperback. Book Condition: new. BRAND NEW, New KS2 English SAT Buster 10-Minute Tests: Grammar, Punctuation & Spelling (2016 SATs & Beyond), CGP Books, CGP Books, This book of SAT Buster

Save Document

...



## Tia Sharp - a Family Betrayal

John Blake Publishing Ltd. Paperback. Book Condition: new. BRAND NEW, Tia Sharp - a Family Betrayal, Nigel Cawthorne, On 3 August 2012, as London was gripped by the Olympics, Tia Sharp, a 12-year-old schoolgirl, was

Save Document

>>



## The Java Tutorial (3rd Edition)

Pearson Education, 2001. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Praise for "The Java' Tutorial, Second Edition" includes: "This book

Save Document

»