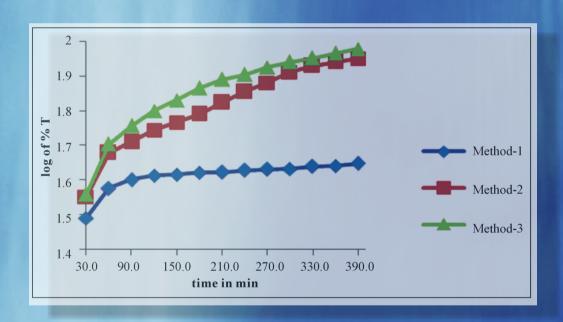




Modern Research in Catalysis





Journal Editorial Board

ISSN: 2168-4480 (Print), 2168-4499 (Online)

http://www.scirp.org/journal/mrc

Editor-in-Chief

Prof. Elio Santacesaria University of Napoli Federico II, Italy

Editorial Board

Dr. Pedro Aguirre University of Chile, Chile
Dr. Erdogan Alper Hacettepe University, Turkey

Dr. Subhash Banerjee Guru Ghasidas Vishwavidyalaya, India

Dr. Apurba Bhattacharya Texas A&M Kingsville, USA

Dr. Yu-Wen Chen National Central University, Chinese Taipei

Dr. Zhengdong Cheng Texas A&M University, USA

Dr. Michael DaramolaDelft University, The NetherlandsDr. Ashish DhawanMidori Renewables Inc., USA

Dr. Juan Garcia Universidad Complutense de Madrid, SpainDr. P. Govindaswamy Indian Oil Corporation Limited, India

Dr. Ismail Ibrahem Mid Sweden University, Sweden

Dr. Ivan Kurtovic New Zealand Institute for Plant & Food Research Limited, New Zealand

Dr. Satish Lakhapatri Codexis, USA

Dr. Chin-Jung LinNational Ilan University, Chinese TaipeiDr. Massoud(Matt) MiriRochester Institute of Technology, USADr. Zeeshan NawazSABIC Technology Center, Saudi ArabiaDr. Ali Asghar RownaghiGeorgia Institute of Technology, USA

Dr. Lakshi Saikia CSIR-North East Institute of Science and Technology, India

Dr. Jing Shang Peking University, China

Dr. Md. Hasan Zahir King Fahd University of Petroleum & Minerals, Saudi Arabia



TABLE OF CONTENTS

Volume 2 Number 4	October 2013
N-Hexane Isomerization on Ni-Pt/Catalysts Supported on Mordenite	
G. S. V. Martins, E. R. F. dos Santos, M. G. F. Rodrigues, G. Pecchi, C. M. N. Yoshioka	a, D. Cardoso119
Synthesis of Chromium(III) Oxide Nanoparticles by Electrochemical Meth	hod and Mukia Maderaspatana
Plant Extract, Characterization, KMnO ₄ Decomposition and Antibacteria	l Study
Rakesh, S. Ananda, N. M. M. Gowda	127
Adsorption of CO and NO on Ceria- and Pt-Supported TiO2: In Situ FTIR Study	
Z. M. El-Bahy	136
An Efficient Activated Carbon for the Wastewater Treatment, Prepared f	rom Peanut Shell
M. Sadiq, S. Hussian.	148
Kinetic and Mechanistic Study of Oxidation of Piperazines by Bromamine	e-T in Acidic Medium
Chandrashekar, B. M. Venkatesha, S. Ananda, N. M. M. Gowda	157
Experimental and Theoretical Properties of MoS_{2+x} Nanoplatelets	
D. H. Galvan, A. P. Amarillas, N. Flizondo, M. José-Vacamán	164

The figure on the front cover is from the article published in Modern Research in Catalysis, 2013, Vol. 2, No. 4, pp. 127-135 by Rakesh, *et al*.

Copyright © 2013 SciRes.

Modern Research in Catalysis (MRC)

Journal Information

SUBSCRIPTIONS

The *Modern Research in Catalysis* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright@2013 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: mrc@scirp.org



Call for Papers

Modern Research in Catalysis

ISSN: 2168-4480 (Print) ISSN: 2168-4499 (Online) http://www.scirp.org/journal/mrc

Modern Research in Catalysis (MRC) is an open access journal published quarterly. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in all aspects of Catalyst.

Editorial Board

Dr. Pedro Aguirre

Dr. Erdogan Alper

Dr. Subhash Banerjee

Dr. Apurba Bhattacharya

Dr. Yu-Wen Chen

Dr. Zhengdong Cheng

Dr. Michael Daramola

Dr. Ashish Dhawan

Dr. Juan Garcia

Dr. P. Govindaswamy

Dr. Ismail Ibrahem

Dr. Ivan Kurtovic

Dr. Satish Lakhapatri

Dr. Chin-Jung Lin

Dr. Massoud(Matt) Miri

Dr. Zeeshan Nawaz

Dr. Ali Asghar Rownaghi

Dr. Lakshi Saikia

Dr. Jing Shang

Dr. Md. Hasan Zahir

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous peer-review process. Accepted papers will immediately appear online followed by printed in hard copy. The areas covered by Modern Research in Catalysis (MRC) include but are not limited to the following fields:

- Applications of Catalysts
- Catalysis by Nano-materials
- Catalytic Function to Fundamental Chemical Processes at Surfaces and in Metal Complexes
- Catalytic Reactions
- Computational Catalysis
- Electrocatalysis
- Enzymatic Catalysis and Spectroscopic Methods for Structural Characterization
- Heterogeneous Catalysis
- Homogeneous Catalysis
- Novel Concepts in Surface Chemistry
- Organocatalysis
- Significant of Catalysis
- Supported Organometallic Catalysis
- Surface Chemistry
- Synthesis and Catalytic Function of Novel Inorganic Solids and Complexes
- Theoretical Methods of the Catalytic Processes

We are also interested in: 1) Short reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science, by delivering superior scientific publications and scientific information solution provider that enable advancement in scientific research.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, world-wide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- •High visibility for maximum global exposure with open access publishing model
- •Rigorous peer review of research papers
- Prompt faster publication with less cost
- •Guaranteed targeted, multidisciplinary audience





Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org