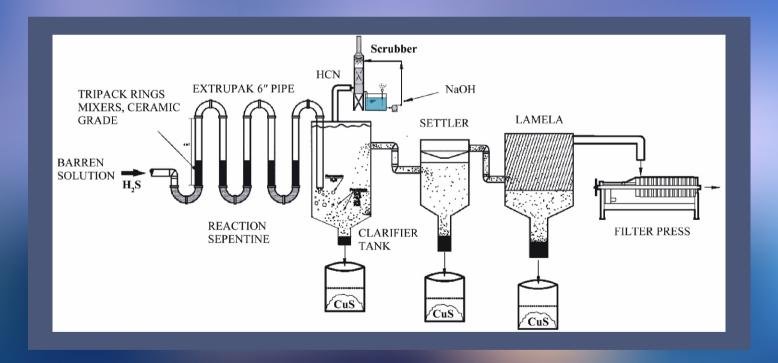


Advances in Chemical Engineering and Science





Journal Editorial Board

ISSN 2160-0392 (Print) ISSN 2160-0406 (Online)

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

.....

Editor in Chief

Prof. SungCheal Moon Korea Institute of Materials Science (KIMS), Korea (South)

Editorial Board

Prof. Azzedine Abbaci Université Badji Mokhtar, Algeria

Prof. Jose-Maria Bastidas Spanish Council for Scientific Research (CSIC), Spain

Dr. Sampa ChakrabartiUniversity of Calcutta, IndiaProf. Juan A. ConesaUniversity of Alicante, Spain

Prof. Zhen Fang Chinese Academy of Sciences, China
Prof. Chang-Sik Ha Pusan National University, Korea (South)

Prof. Hasan Abdellatif Hasan Jordan University of Science and Technology, Jordan

Dr. Christopher J. Koroneos University of Western Macedonia, Greece

Prof. Bogdana KoumanovaUniversity of Chemical Technology and Metallurgy (UCTM), Bulgaria

Prof. Roberto Fernández Lafuente Consejo Superior de Investigaciones Científicas, Spain

Prof. Lubomir Lapcik Tomas Bata University in Zlín, Czech

Prof. Fengshan Liu National Research Council Canada, Canada

Dr. Muhammad Mansha University of Engineering and Technology, Pakistan

Prof. Hamdaoui Oualid University of Annaba, Algeria

Prof. KSMS Raghavarao Central Food Technological Research Institute (CFTRI), India

Prof. Dewey RyuUniversity of California, USA

Prof. Hristo Sapoundjiev Natural Resources Canada, Canada

Prof. Chi-Min ShuNational Yunlin University of Science and Technology, Chinese Taipei

Prof. Georgiy Borisovich Shul'Pin Russian Academy of Sciences, Russia

Dr. Ajaya Kumar Singh Government VYT Post Graduate Autonomous College, India

Dr. Atul Tiwari University of Hawaii at Manoa, USA

Dr. Neven Ukrainczyk University of Zagreb, Croatia

Dr. Shuangzhen WangNational Insistute of Standards and Technology, USA

Dr. Chunliang WuLouisiana State University, USA

Dr. Hongwei Wu Beijing University of Aeronautics and Astronautics, China

Prof. Gennady Efremovich Zaikov Moscow State Academy, Russia

Dr. An Zhang Biogen Idec, USA

Editorial Assistant

Jing Guo Scientific Research Publishing, USA. Email: aces@scirp.org



TABLE OF CONTENTS

Volume 1 Number 4	October 2011
Structured Perovskite-Based Oxides: Use in the Combined Methane Reforming	
A. García, N. Becerra, L. García, I. Ojeda, E. López, C. M. López, M. R. Goldwasser	169
Study on Co-Effect of K ₂ SO ₄ Deposition and Low Concentration SO ₂ on Performances	
of V ₂ O ₅ /AC Catalysts for Low Temperature SCR	
X. L. Zhang, B. W. Shi, X. P. Wu, Z. G. Huang, Z. Y. Liu, B. J. Yang, C. P. Zhang	176
Formation and Elimination of Pollutant during Sludge Decomposition in the Presence of	
Cement Raw Material and Other Catalysts	
J. A. Conesa, A. Gálvez, I. Martín-Gullón, R. Font.	183
Copper and Cyanide Recovery in Cyanidation Effluents	
J. R. Parga, J. L. Valenzuela, H. Moreno, J. E. Pérez.	191
Quasi-Dimensional Modeling of a CNG Fueled HCCI Engine Combustion Using Detailed	
Chemical Kinetic	
Y. Bakhshan, A. Shadaei, S. Niazi	198
Melt Rheology of Poly(Lactic Acid)/Low Density Polyethylene Polymer Blends	
K. Hamad, M. Kaseem, F. Deri.	208
Study the Critical Role of Admixtures in Cement Production: The Optimum State of Cassiterite	(SnO ₂)
Addition as a Natural Mineralizer-Oxide Influencing the Cement Properties	
I. Baziotis, A. Chandrinos, G. Leontakianakos.	215
Alternative UV Sensors Based on Color-Changeable Pigments	
M. Vikova, M. Vik	224
Status and Spatial Visualization of Toxic Pollutants (BTEX) in Urban Atmosphere	
M. Mansha, A. R. Saleemi, J. H. Naqvi.	231
Evaluation of the Inverse Fluidized Bed Biological Reactor for Treating High-Strength	
Industrial Wastewaters	
W. Sokół, B. Woldeyes.	239
Pretreatment of Wastewater Streams from Petroleum/Petrochemical Industries	
Using Coagulation	
H. Altaher, E. ElQada, W. Omar	245

Copyright © 2011 SciRes. **ACES**

Advances in Chemical Engineering and Science, 2011, 1, 169-312

Published Online October 2011 in SciRes (http://www.SciRP.org/journal/aces/)



The Influence of Surface Energy on the Washing Quality of Filter Cakes	
M. Wilkens, U. A. Peuker	252
Understanding the Glycoproteins Release from Alginate-Barium Capsules in	
Physiologic Enviroments	
E. P. Herrero, E. M. M. del Valle, M. A. Galán.	256
Non-Isothermal Separation Process of Two-Phase Mixture Water/Ultra-Viscous Heavy	
Oil by Hydrocyclone	
J. S. de Souza, F. P. M. Farias, R. Swarnakar, S. R. de F. Neto, A. G. B. de Lima.	271
Industrial Progress: New Energy-Efficient Absorbents for the CO ₂ Separation from	
Natural Gas, Syngas and Flue Gas	
J. Rolker, M. Seiler.	280
Determination of External Mass Transfer Model for Hydrolysis of Jatropha Oil Using	
Immobilized Lipase in Recirculated Packed-Bed Reactor	
CW. Cheng, R. Abdulla, R. R. Srihhar, P. Ravindra	289
Preparation of Highly Concentrated Silver Nanoparticles in Reverse Micelles of Sucrose	
Fatty Acid Esters through Solid-Liquid Extraction Method	
H. Noritomi, Y. Umezawa, S. Miyagawa, S. Kato	299
Separation Performance of Sodium Alginate/Poly(Vinyl Pyrrolidone) Membranes for	
Aqueous/Dimethylformamide Mixtures by Vapor Permeation and Vapor Permeation	
with Temperature Difference Methods	
E. K. Solak, O. Şanlı	305

The figure on the front cover is from the article published in October, 2011, Vol. 1, No. 4, pp. 191-197 by José R. Parga, Jesús L. Valenzuela, Héctor Moreno and Jaime E. Pérez.

Copyright © 2011 SciRes.

Advances in Chemical Engineering and Science (ACES)

Journal Information

SUBSCRIPTIONS

The Advances in Chemical Engineering and Science (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©2011 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: aces@scirp.org



Advances in Chemical Engineering and Science

ISSN: 2160-0392 (Print), 2160-0406 (Online)

www.scirp.org/journal/aces

Advances in Chemical Engineering and Science is an open access, peer-reviewed and fully refereed journal focusing on theories, methods and applications in chemical engineering and science. 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 different areas of Advances in Chemical Engineering and Science.

Editor-in-Chief

Prof. SungCheal Moon

Korea Institute of Materials Science (KIMS), Korea (South)

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Biochemical Engineering
- Bio-engineering Materials
- Chemicals
- Chemical Engineering Biotechnology
- Chemical Reaction
- Chemical Reaction Related Unit Operations
- Composite Materials
- Electrochemistry of Nanomaterials and Applications
- Energy Engineering
- Environmental Engineering
- Fluid Mechanics
- Green Chemistry

- Molecular Assembly
- Nanomaterials
- Nano-scale Phenomena
- Nanostructured Materials
- Nanotechnology
- Natural Products
- Optimization of Chemical Engineering Systems
- Petrochemical
- Pharmaceuticals Polymers
- Specialty Chemicals
- Transport Phenomena

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the *ACES*.

Notes for Intending Authors

Submitted papers should not be previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers will be peer reviewed. For more derails about the submission, please access the website.

Website and E-Mail

www.scirp.org/journal/aces/ E-mail: aces@scirp.org