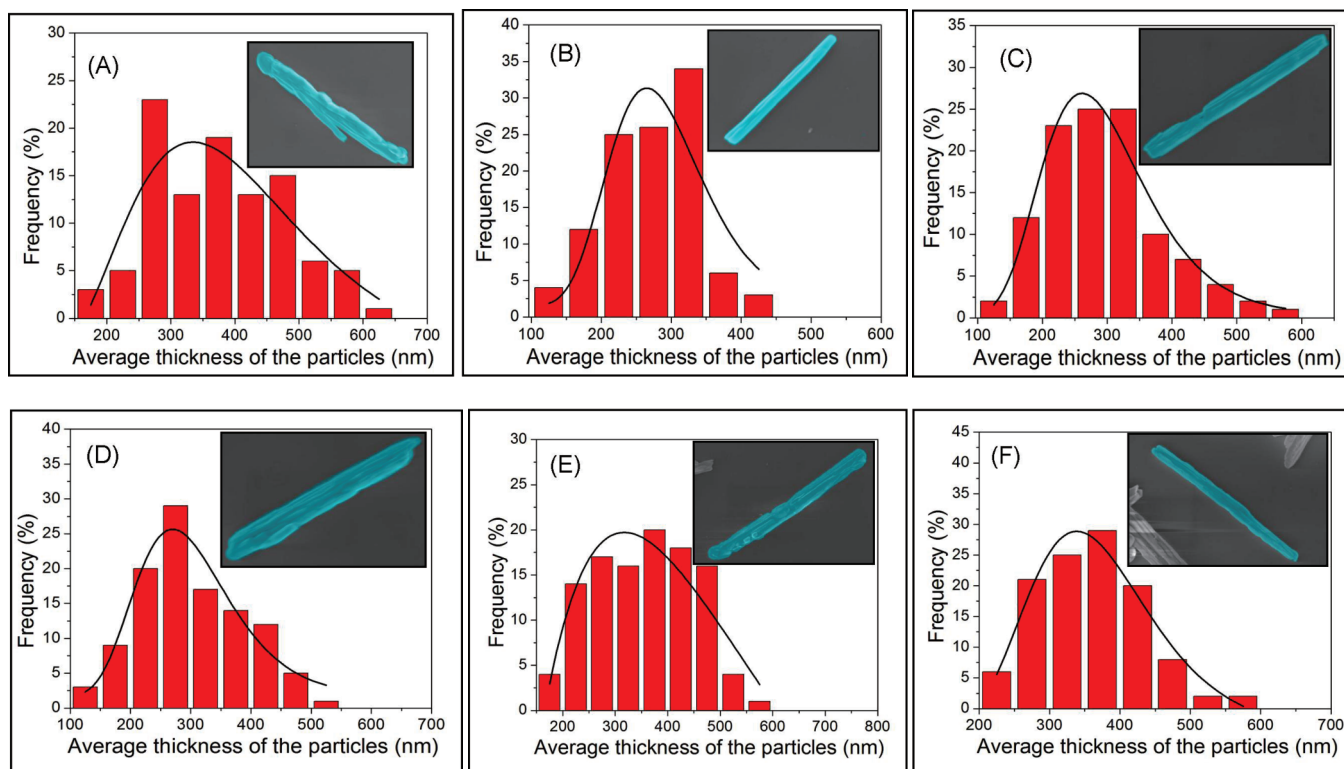




Advances in Chemical Engineering and Science



ISSN: 2160-0392



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), South Korea

Editorial Board

Prof. Azzedine Abbaci Université Badji Mokhtar, Algeria
Prof. Jose-Maria Bastidas Spanish Council for Scientific Research (CSIC), Spain
Dr. Sampa Chakrabarti University of Calcutta, India
Dr. Changle Chen Celanese Corporation, USA
Prof. Juan A. Conesa University of Alicante, Spain
Prof. Zhen Fang Chinese Academy of Sciences, China
Prof. Chang-Sik Ha Pusan National University, South Korea
Prof. Hasan Abdellatif Hasan Jordan University of Science and Technology, Jordan
Dr. Christopher J. Koroneos National Technical University of Athens, Greece
Prof. Roberto Fernández Lafuente Consejo Superior de Investigaciones Científicas, Spain
Prof. Lubomir Lapcik Tomas Bata University, Czech Republic
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. Hristo Sapoundjiev Natural Resources Canada, Canada
Prof. Chi-Min Shu National Yunlin University of Science and Technology, Chinese Taipei
Prof. Georgiy B. Shul'pin Russian Academy of Sciences, Russia
Dr. Ajaya Kumar Singh Government VYT Post Graduate Autonomous College, India
Dr. Neven Ukrainczyk University of Zagreb, Croatia
Dr. Shuangzhen Wang National Insistute of Standards and Technology, USA
Dr. Chunliang Wu Louisiana State University, USA
Dr. Hongwei Wu Beijing University of Aeronautics and Astronautics, China
Prof. Gennady Efremovich Zaikov Moscow State Academy of Fine Chemical Technology, Russia

TABLE OF CONTENTS

Volume 2 Number 4

October 2012

Two-Dimensional Lithium-Ion Battery Modeling with Electrolyte and Cathode Extensions G. F. Kennell, R. W. Evitts.....	423
Effects of Side-Chain on Conformational Characteristics of Poly(3,5-Dimethyl-Phenylacrylate) in Toluene at 40°C N. Hamidi, S. Ihekweazu, C. A. Wiredu, O. H. Isa, K. Watley, C. Rowe, B. Nimmons, A. Prezzy, T. Govan, S. Scoville, Q. Hills, J. Salley.....	435
A Laboratory Study of the Effect of Temperature on Densities and Viscosities of Binary and Ternary Blends of Soybean Oil, Soy Biodiesel and Petroleum Diesel Oil O. A. Aworanti, S. E. Agarry, A. O. Ajani.....	444
Sensitive Voltammetric Determination of Mitoxantrone by Using CS-Dispersed Graphene Modified Glassy Carbon Electrodes B. Hong, Q. Cheng.....	453
Fabrication and Characterization of Phthalocyanine/C₆₀ Solar Cells with Inverted Structure K. Yoshida, T. Oku, A. Suzuki, T. Akiyama, Y. Yamasaki.....	461
Photoluminescent Properties of CoMoO₄ Nanorods Quickly Synthesized and Annealed in a Domestic Microwave Oven A. P. de Moura, L. H. de Oliveira, P. F. S. Pereira, I. L. V. Rosa, M. S. Li, E. Longo, J. A. Varela.....	465
Investigations into Optimization Models of Crude Oil Distillation Column in the Context of Feed Stock and Market Value L. T. Popoola, J. A. Adeniran, S. O. Akinola.....	474
Conceptual Modeling of Contaminated Solute Transport Based on Stream Tube Model S.-G. Chung, S.-J. Lee, D.-J. Kim, S.-H. Lee, J.-W. Choi.....	481
Treatment of Pulp and Paper Mill Wastewater with Various Molecular Weight of PolyDADMAC Induced Flocculation with Polyacrylamide in the Hybrid System M. A. A. Razali, Z. Ahmad, A. Ariffin.....	490
An Equation of State for Nonaqueous Electrolyte Solutions Z. Han.....	504
Separation and Recovery of Iodine from Aqueous Solution by Permeation and Chemical Desorption (PCD) Using a Silicone Rubber Membrane J. Sawai, H. Tomizuka, N. Hatanaka, T. Minami, M. Kikuchi, T. Ishii.....	508
Evidence that the Vinland Map Was Drawn Using an Iron Gall Ink: The Continuing Need for Further Research J. S. Olin.....	514
Chemical Composition of the Cashew Apple Bagasse and Potential Use for Ethanol Production F. C. dos Santos Lima, F. L. H. da Silva, J. P. Gomes, J. M. da Silva Neto.....	519

The figure on the front cover is from the article published in Advances in Chemical Engineering and Science, 2012, Vol. 2, No. 4, pp. 465-473 by Ana P. de Moura, *et al.*

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©2012 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.

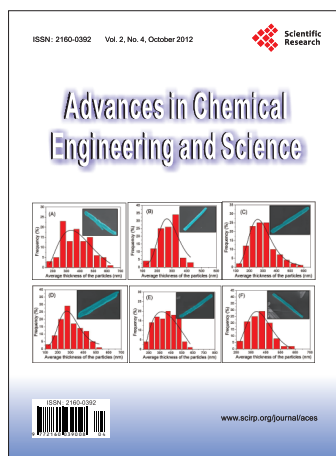
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 assume 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), South Korea

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
- Chemical Engineering Biotechnology
- Chemical Reaction
- Chemical Reaction Related Unit Operations
- Chemicals
- 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 details about the submission, please access the website.

Website and E-Mail

www.scirp.org/journal/aces

E-mail: aces@scirp.org