

Open Journal of Modelling and Simulation



https://www.scirp.org/journal/ojmsi

Journal Editorial Board

ISSN: 2327-4018 (Print), 2327-4026 (Online) https://www.scirp.org/journal/ojmsi

Editor-in-Chief

Prof. Bilal Chanane

King Fahd University of Petroleum & Minerals, Saudi Arabia

Editorial Board

Dr. Izhar Ahmad King Fahd University of Petroleum & Minerals, Saudi Arabia Dr. Alessandro Bazzi National Research Council of Italy, Italy **Prof. Emilio Defez Candel** Universidad Politécnica de Valencia, Spain **Prof. Nuno Crokidakis** Fluminense Federal University, Brazil **Dr. Todd Easton** Kansas State University, Afghanistan **Prof. Beih El-Sayed El-Desouky** Mansoura University, Egypt **Dr. Jerome Feret** Institute National de Recherce en Informatique et Automatique, France Dr. Shaojing Fu National University of Defense Technology, China Dr. Francisco Guijarro Universidad Politécnica de Valencia, Spain **Prof. Mirsad Hadzikadic** University of North Carolina at Charlotte, USA Universidad Politécnica de Valencia, Spain Prof. Antonio Hervás Jorge Prof. Hossein Jafari University of South Africa, South Africa Dr. Prakash Chand Jain Scientist DRDL Hyderabad, India **Prof. E. Stanley Lee** Kansas State University, USA Dr. Anibal Muñoz Loaiza Universidad del Quindío, Colombia Dr. Ricardo López-Ruiz University of Zaragoza, Spain Dr. Gangfeng Ma Old Dominion University, USA Dr. Daniel Makundwaneyi Madyira University of Johannesburg, South Africa Dr. Morteza Mohammadzaheri University of Adelaide, Australia Dr. Md. Mamun Molla North South University, Bangladesh Dr. Terence O'kane Commonwealth Scientific and Industrial Research Organisation, Australia Dr. Tarek Ragab University of Tabuk, Saudi Arabia Dr. Beatriz Ricarte Universitat Politècnica de València, Spain **Dr. Gregorio Romero** Technical University of Madrid, Spain Dr. P. Sanjeevikumar Aalborg University, Denmark Dr. Sergio Serrano University of Zaragoza, Spain Dr. Aamir Shahzad Government College University, Pakistan Dr. Santiago Silvestre Universitat Politècnica de Cataluny, Spain Dr. Yu Sun Our Lady of the Lake University, USA **Dr. Néstor Thome** Universitat Politècnica de València, Spain Dr. Abdessamad Tridane United Arab Emirates University, UAE Dr. Wilfred van der Vegte Delft University of Technology, The Netherlands Dr. Hamed Yarmand Massachusetts General Hospital, USA Dr. Mehmet Yavuz Necmettin Erbakan University, Turkey Dr. Yu Zeng Duke University, USA



Table of Contents

Volume 10 Nu	mber 2	April 2022
Performance Investigat Aspen Plus	ion of Biomass Gasification for Syngas	and Hydrogen Production Using
S. Safarian, R. Unnthorss	son, C. Richter	
Essence of MIKE 21C () of Bangladesh	FDM Numerical Scheme): Application	on the River Morphology
S. Sarker		
Simulating the Impact of Economy in the Post Co	of the Economic Sustainability Plan on OVID-19 Era	the Performance of the Nigerian
D. T. Akighir, E. T. Kpog	ghul, E. J. Ebele, R. Ikwue, J. V. Ikyator, J. M.	Ayaga118
Simulation Analysis of	Transponder Power Based on Target F	light Trajectory
X. Chen, X. F. Zhang, W.	. J. Qiu, X. Tu	
Dynamics of the Austri	an Food Market: Application of Lotka-	Volterra Differential Equations
R. Bauer, F. Schwarzmay	r, N. Brunner, M. Kühleitner	
The Handling of "Waite Dynamics Approach	ers" Problem by Telecommunication S	ervice Provider: A System
M. I. M. Yusoff		
Estimating the Level of	Asymptomatic COVID-19 Infections i	n Northern Ireland in 2020
P. A. Hall, G. Kiss, T. Ku	hn, S. Moutari, E. Patterson, E. Smith	
StochSD: A Full Potenti and Statistical Analysis	ial CSS Language for Dynamic and Sto	chastic Modelling, Simulation
L. Gustafsson, E. Gustafs	son, M. Gustafsson	

Open Journal of Modelling and Simulation (OJMSi) Journal Information

SUBSCRIPTIONS

The *Open Journal of Modelling and Simulation* (Online at Scientific Research Publishing, <u>https://www.scirp.org/</u>) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates: Print: \$39 per issue. To subscribe, please contact Journals Subscriptions Department, E-mail: <u>sub@scirp.org</u>

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: <u>sub@scirp.org</u>

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2022 by Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

Copyright for individual papers of the journal:

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

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: ojmsi@scirp.org



Open Journal of Modelling and Simulation

ISSN: 2327-4018 (Print) ISSN: 2327-4026 (Online) https://www.scirp.org/journal/ojmsi

Open Journal of Modelling and Simulation (OJMSi) 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 modelling and simulation.

Editorial Board

Dr. Izhar Ahmad Dr. Alessandro Bazzi Prof. Emilio Defez Candel Prof. Nuno Crokidakis Dr. Todd Easton Prof. Beih El-Sayed El-Desouky Dr. Jerome Feret Dr. Shaojing Fu Dr. Francisco Guijarro Prof. Mirsad Hadzikadic Prof. Antonio Hervás Jorge Prof. Hossein Jafari

Subject Coverage

- Dr. Prakash Chand Jain Prof. E. Stanley Lee Dr. Anibal Muñoz Loaiza Dr. Ricardo López-Ruiz Dr. Gangfeng Ma Dr. Daniel Makundwaneyi Madyira Dr. Morteza Mohammadzaheri Dr. Md. Mamun Molla Dr. Terence O'kane Dr. Tarek Ragab Dr. Beatriz Ricarte Dr. Gregorio Romero
- Dr. P. Sanjeevikumar Dr. Sergio Serrano Dr. Aamir Shahzad Dr. Santiago Silvestre Dr. Yu Sun Dr. Néstor Thome Dr. Abdessamad Tridane Dr. Wilfred van der Vegte Dr. Hamed Yarmand Dr. Mehmet Yavuz Dr. Yu Zeng

Call for Papers

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 hard copy. The journal publishes original papers including but not limited to the following fields:

- Aerospace Technology Simulation
- Aircraft Design Simulations
- Applications of Social and Economic Models
- Chemical Process Simulation
- Computational Intelligence
- Computer Science
- Constitutive Modelling of Materials
- Control Theory
- Dynamic Response of Mechanical Systems
- Dynamical Systems
- Finite Element/Computational Fluid Dynamics Simulation

- Many Agents Complex Systems
- Mathematical Biology
- Military Technology Simulation
- Nonlinear Processes
- Numerical Analysis
- Numerical Modelling
- Rigid/Flexible Body Mechanisms Simulations
- •Seismic Simulation of Civil Structures
- Simulation Modeling Theories and Methodologies
- Visual Simulation

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) Short communications—2-5 page papers; 3) Technical notes—2-5 page papers; 4) Letters to the editor (the number of pages is not restricted); 5) Reviews or book reviews—comments and critiques (the number of pages is not restricted); 6) Advertisement—1-2 page papers; 7) News letters—1-5 page papers.

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

https://www.scirp.org/journal/ojmsi Email: ojmsi@scirp.org