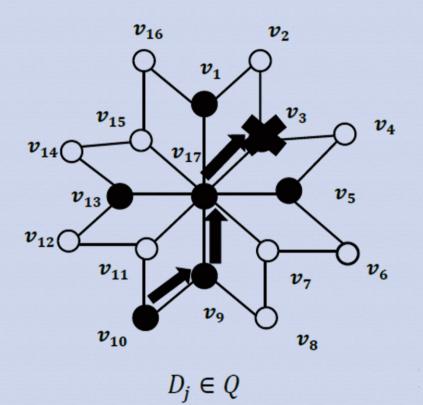


# Open Journal of Discrete Mathematics





www.scirp.org/journal/ojdm

# **Journal Editorial Board**

ISSN 2161-7635 (Print) ISSN 2161-7643 (Online) http://www.scirp.org/journal/ojdm

# **Editor-in-Chief**

**Prof. Viorel Nitica** 

Department of Mathematics, West Chester University, USA

.....

# **Editorial Board**

**Prof. Octavian Agratini** Dr. Tiru Arthanari Dr. Ibrahim Büyükyazici Dr. Ardeshir Dolati **Prof. Amr Elmasrv** Prof. Juan Luis García Guirao Prof. Tianxiao He Prof. Pawel Hitczenko Prof. Dae San Kim **Prof. Christian Lavault** Prof. Rao Li **Prof. Rong Luo** Prof. Hosam M. Mahmoud **Prof. Yannis Manoussakis Prof. Toufik Mansour** Dr. Radu Miculescu **Prof. Reza Modarres Dr. Sudev Naduvath Prof. Nicolae Adrian Secelean Prof. Sandor Szabo Prof. Liming Xiong Prof. Kexiang Xu** Prof. Qinglin Roger Yu **Prof. Xiaodong Zhang** 

Babes-Bolyai University, Romania University of Auckland, New Zealand Ankara University, Turkey Shahed University, Iran Alexandria University, Egypt Universidad Politécnica de Cartagena, Spain Illinois Wesleyan University, USA Drexel University, USA Sogang University, South Korea Université Paris 13. France University of South Carolina Aiken, USA West Virginia University, USA The George Washington University, USA University Paris-XI, France University of Haifa, Israel University of Bucharest, Romania The George Washington University, USA Vidya Academy of Science & Technology, India Lucian Blaga University from Sibiu, Romania University of Pécs, Hungary Beijing Institute of Technology, China Nanjing University of Aeronautics and Astronautics, China Thompson Rivers University, USA Shanghai Jiao Tong University, China



# **Table of Contents**

## Volume 9 Number 3

## July 2019

Infinite Sets of Solutions and Almost Solutions of the Equation $N \cdot M$ = reversal $(N \cdot M)$	
V. Nițică, P. Junius	63
Domination and Eternal Domination of Jahangir Graph	
R. Shaheen, M. Assaad, A. Kassem	68

The figure on the front cover is from the article published in Open Journal of Discrete Mathematics, 2019, Vol. 9, No. 3, pp. 68-81 by Ramy Shaheen, *et al.* 

### Open Journal of Discrete Mathematics (OJDM) Journal Information

#### SUBSCRIPTIONS

The *Open Journal of Discrete Mathematics* (Online at Scientific Research Publishing, <u>www.SciRP.org</u>) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates: Print: \$79 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 © 2019 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 © 2019 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: ojdm@scirp.org



# **Call for Papers**

# **Open Journal of Discrete Mathematics**

ISSN: 2161-7635 (Print) ISSN: 2161-7643 (Online) http://www.scirp.org/journal/ojdm

**Open Journal of Discrete Mathematics (OJDM)** is an international journal dedicated to the latest advancement of discrete mathematics. 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 discrete mathematics.

# Subject Coverage

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

- Calculus of finite differences, discrete calculus or discrete analysis
- Combinatorics
- Discrete algorithms
- Discrete analogues of continuous mathematics
- Discrete probability
- Game theory, decision theory, utility theory, social choice theory
- Graph theory
- Hybrid discrete and continuous mathematics
- Information theory
- Networks

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

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

E-mail: ojdm@scirp.org

### 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 with its publication.

### What is Open Access?

Art and Design Review

Advances in

dvances in Biological bemistry Entomolog

Applied Mathematics

Engineering

nii ili a

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, worldwide, 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

Soft

- 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