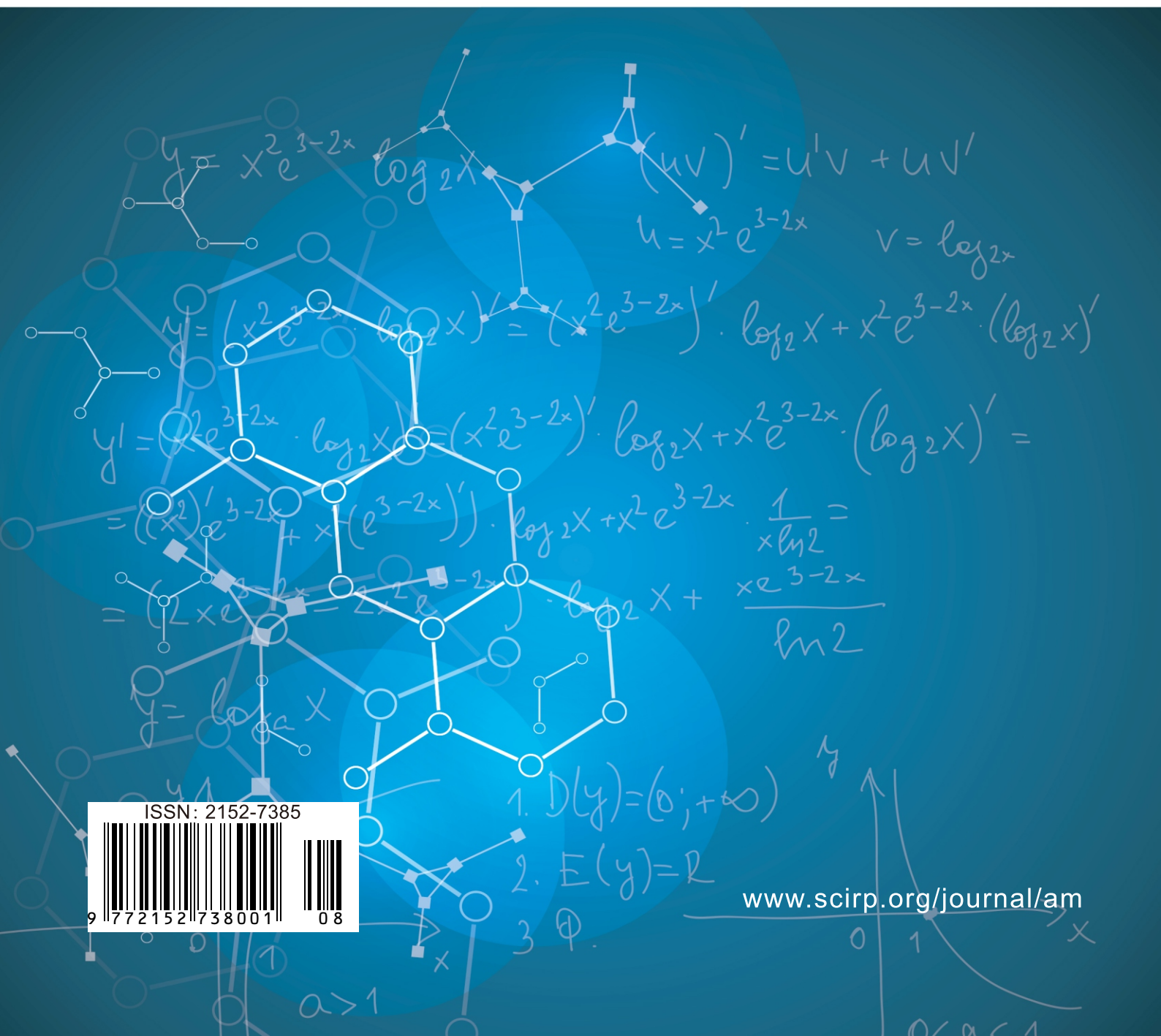


# Applied Mathematics



# Journal Editorial Board

ISSN Print: 2152-7385      ISSN Online: 2152-7393

<http://www.scirp.org/journal/am>

---

## Editor-in-Chief

**Prof. Chris Cannings**

University of Sheffield, UK

## Editorial Board

**Prof. Tamer Başar**

University of Illinois at Urbana-Champaign, USA

**Prof. Leva A. Beklaryan**

Russian Academy of Sciences, Russia

**Dr. Aziz Belmiloudi**

Institut National des Sciences Appliquees de Rennes, France

**Dr. Anjan Biswas**

Delaware State University, USA

**Prof. Mark Broom**

City University, UK

**Prof. Amares Chattopadhyay**

Indian School of Mines, India

**Prof. Badong Chen**

Xi'an Jiaotong University, China

**Prof. Ljubomir Ciric**

University of Belgrade, Serbia

**Prof. Jose Alberto Cuminato**

University of Sao Paulo, Spain

**Prof. Konstantin Dyakonov**

University of Barcelona, Spain

**Prof. Elena Guardo**

University of Catania, Italy

**Prof. Anwar H. Joarder**

University of Liberal Arts Bangladesh (ULAB), Bangladesh

**Prof. Palle Jorgensen**

University of Iowa, USA

**Dr. Vladimir A. Kuznetsov**

Bioinformatics Institute, Singapore

**Prof. Kil Hyun Kwon**

Korea Advanced Institute of Science and Technology, South Korea

**Prof. Hong-Jian Lai**

West Virginia University, USA

**Dr. Goran Lesaja**

Georgia Southern University, USA

**Prof. Tao Luo**

Georgetown University, USA

**Prof. Addolorata Marasco**

University of Naples Federico II, Italy

**Prof. María A. Navascués**

University of Zaragoza, Spain

**Prof. Anatolij Prykarpatski**

AGH University of Science and Technology, Poland

**Prof. Alexander S. Rabinowitch**

Moscow State University, Russia

**Prof. Mohammad Mehdi Rashidi**

Tongji University, China

**Prof. Yuriy V. Rogovchenko**

University of Agder, Norway

**Prof. Ram Shanmugam**

Texas State University, USA

**Dr. Epaminondas Sidiropoulos**

Aristotle University of Thessaloniki, Greece

**Prof. Sergei Silvestrov**

Mälardalen University, Sweden

**Prof. Hari M. Srivastava**

University of Victoria, Canada

**Prof. Jacob Sturm**

Rutgers University, USA

**Prof. Mikhail Sumin**

Nizhnii Novgorod State University, Russia

**Dr. Wei Wei**

Xi'an University of Technology, China

**Dr. Wen Zhang**

Icahn School of Medicine at Mount Sinai, USA

# Table of Contents

**Volume 9    Number 8**

**August 2018**

**On the ECI and CEI of Boron-Nitrogen Fullerenes**

T. Z. Wu, Y. Wu.....891

**On the Dynamics of Transition of a Classical System to Equilibrium State**

S. M. AL-Jaber.....897

**Ordered Rate Constitutive Theories for Non-Classical Thermoviscoelastic Fluids with Internal Rotation Rates**

K. S. Surana, S. W. Long, J. N. Reddy.....907

**Application of Conjugate Gradient Approach for Nonlinear Optimal Control Problem with Model-Reality Differences**

S. L. Kek, W. J. Leong, S. Y. Sim, K. L. Teo.....940

**Methodology for Constructing a Short-Term Event Risk Score in Heart Failure Patients**

K. Duarte, J.-M. Monnez, E. Albuissou.....954

**Extended Wiener Measure by Nonstandard Analysis for Financial Time Series**

S. Kanagawa, R. Nishiyama, K. Tchizawa.....975

**Modeling and Numerical Solution of a Cancer Therapy Optimal Control Problem**

M.-L. Kienle Garrido, T. Breitenbach, K. Chudej, A. Borzi.....985

**An Alternative Analysis on Nilsson-Ehle's Hybridization Experiment in Wheat**

T. Z. Zhang, X. M. Jia, Z. Xu.....1005

**Variable Daily Air Temperature Model for Analysis and Design**

G. Danko, C. Lu.....1015

# Applied Mathematics (AM)

## Journal Information

### SUBSCRIPTIONS

The *Applied Mathematics* (Online at Scientific Research Publishing, [www.SciRP.org](http://www.SciRP.org)) is published monthly by Scientific Research Publishing, Inc., USA.

#### Subscription rates:

Print: \$89 per copy.

To subscribe, please contact Journals Subscriptions Department, E-mail: [sub@scirp.org](mailto:sub@scirp.org)

### SERVICES

#### Advertisements

Advertisement Sales Department, E-mail: [service@scirp.org](mailto:service@scirp.org)

#### Reprints (minimum quantity 100 copies)

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

E-mail: [sub@scirp.org](mailto:sub@scirp.org)

### COPYRIGHT

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

Copyright © 2018 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 © 2018 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: [am@scirp.org](mailto:am@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?***

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
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



**Scientific  
Research  
Publishing**

**Website: <http://www.scirp.org>**

**Subscription: [sub@scirp.org](mailto:sub@scirp.org)**

**Advertisement: [service@scirp.org](mailto:service@scirp.org)**