



Athens Journal of Sciences

Volume 5, Issue 1, March 2018

Table of Contents

President's Message	5
ARTICLES	
Adsorption and Degradation Kinetics of Methylene Blue on As-prepared and Calcined Titanate Nanotubes <i>Stanislav Kurajica, Iva Minga, Roko Blazic, Katarina Muzina & Petra Tominac</i>	7
Elastic-Microplastic Transitions in Rocks during Low-Intensity Wave Propagation <i>Eduard Mashinskii</i>	23
Electrochemistry of Eugenol and its Metabolism on a Bare Screen-Printed Electrode <i>Rafaela Vasiliadou</i>	39
Fishing Gear and Set Methodology Models for Target Species Fishing Success in Gulf of Mexico Longline Reef Fishing <i>Alexandria E. Rivard & Wyndylyn von Zharen</i>	53
Announcements	75

Published by



The [Natural & Formal Sciences Research Division](#) of
The Athens Institute for Education and Research

Athens Journal of Science:

A journal of The Natural & Formal Sciences of
The Athens Institute for Education and Research:

ISSN NUMBER: 2241-8466

DOI: 10.30958/ajs

Editors of this Journal

- **Dr. Nicolas Abatzoglou**, Head, Environment Research Unit, ATINER & Professor, Department of Chemical & Biotechnological Engineering, University of Sherbrook, Canada, Chair Pfizer, PAT in Pharmaceutical Engineering, Director GREEN-TPV and GRTP-C & Pwelcomes.
- **Dr. Christopher Janetopoulos**, Head, Biology Research Unit, ATINER & Associate Professor, University of the Sciences, USA. (Biology)
- **Dr. Ethel Petrou**, Academic Member, ATINER & Professor and Chair, Department of Physics, Erie Community College-South, State University of New York, USA.
- **Dr. Ellene Tratras Contis**, Head, Chemistry Research Unit, ATINER & Professor of Chemistry, Eastern Michigan University, USA. (Chemistry)

Editorial and Reviewers' Board

Managing Editor

Ms. Afrodete Papanikou

Offices

Athens Institute for Education and Research

8 Valaoritou Street, 10671 Athens, Greece

Phone: + 30 210 3634210 Fax + 30 210 3634209

Email: science-journal@atiner.gr

URL: <https://www.athensjournals.gr/ajs>

Athens Journal of Sciences

Volume 5, Issue 1, March 2018

Table of Contents

President's Message	5
ARTICLES	
<u>Adsorption and Degradation Kinetics of Methylene Blue on As-prepared and Calcined Titanate Nanotubes</u> <i>Stanislav Kurajica, Iva Minga, Roko Blazic, Katarina Muzina & Petra Tominac</i>	7
<u>Elastic-Microplastic Transitions in Rocks during Low-Intensity Wave Propagation</u> <i>Eduard Mashinskii</i>	23
<u>Electrochemistry of Eugenol and its Metabolism on a Bare Screen-Printed Electrode</u> <i>Rafaela Vasiliadou</i>	39
<u>Fishing Gear and Set Methodology Models for Target Species Fishing Success in Gulf of Mexico Longline Reef Fishing</u> <i>Alexandria E. Rivard & Wyndelyn von Zharen</i>	53
Announcements	75

Theophrastus was a Greek philosopher of the Peripatetic school, and immediate successor of Aristotle in leadership of the Lyceum.



President's Message

The Athens Institute for Education and Research (ATINER) is pleased to announce the publication of a number of peer reviewed, open access journals of original research work. Most of the articles will be selected from the numerous papers that have been presented at the various annual international academic conferences organized by the different research divisions and units of the Athens Institute for Education and Research. The plethora of papers presented every year will enable the editorial board of each journal to select the best, and in so doing produce a top quality academic journal. In addition to papers presented, ATINER will encourage the independent submission of papers to be evaluated for publication.

The current issue is the first from the fifth volume of the *[Athens Journal of Sciences](#)* published by the [Natural & Formal Sciences Research Division](#) of the Athens Institute for Education and Research (ATINER).

The Head of the [Natural & Formal Sciences Research Division](#) is member of the Editorial Advisory Board. The Academic Members of the research unit are members of the Editorial Board and will assist the editor and the Editorial Advisory Board with the peer reviewing of all submitted papers. Currently, the academic members of the five research units consist of over 100 international experts from about 50 countries.

Gregory T. Papanikos

President

Athens Institute for Education and Research

