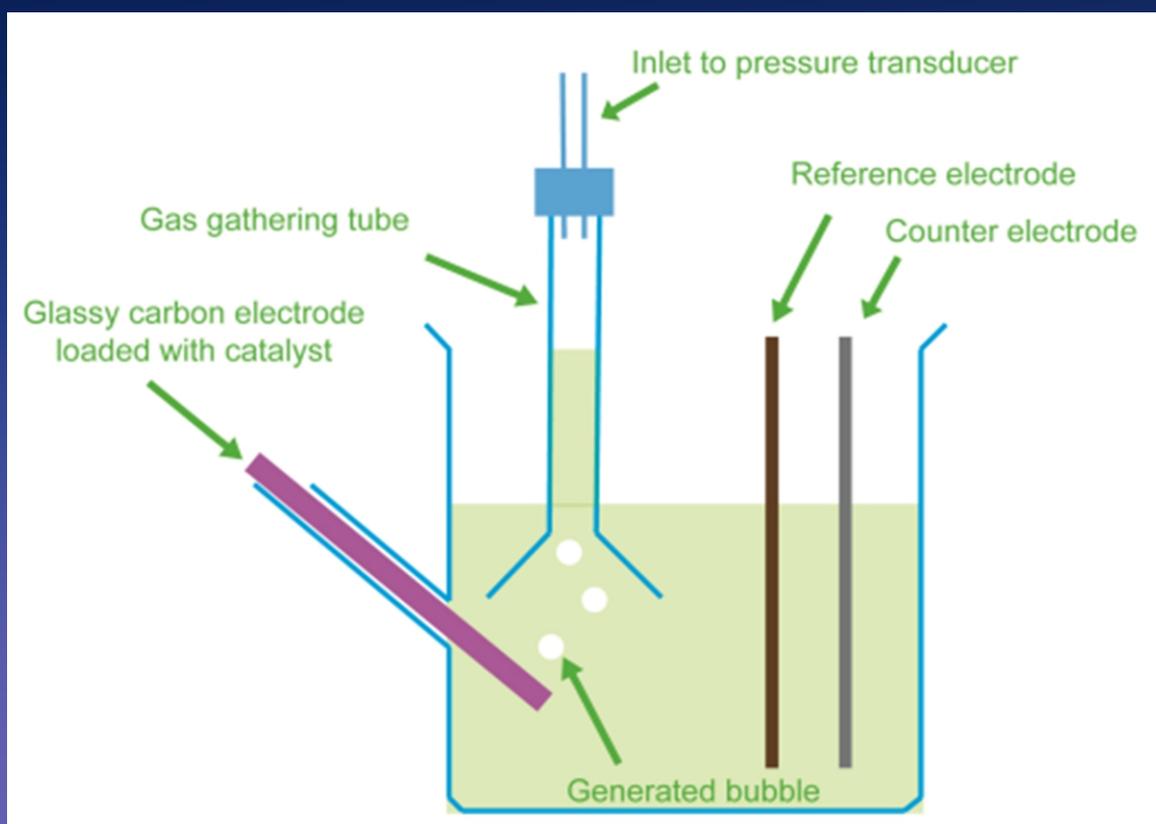




# American Journal of Analytical Chemistry



ISSN: 2156-8251



# Journal Editorial Board

ISSN Print: 2156-8251 ISSN Online: 2156-8278

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

---

## Editor-in-Chief

**Prof. Raman Venkataramanan**

University of Pittsburgh, USA

## Editorial Board

<b>Prof. Talal Ahmad Aburjai</b>	University of Jordan, Jordan
<b>Dr. Mohamed Said Attia</b>	Ain Shams University, Egypt
<b>Prof. Doo Soo Chung</b>	Seoul National University, South Korea
<b>Dr. Jimmy Thomas Efirid</b>	University of North Carolina, USA
<b>Dr. Lizhen Gao</b>	University of Western Australia, Australia
<b>Dr. Gustavo Stoppa Garbellini</b>	Federal University of São Carlos (UFSCAR), Brazil
<b>Prof. Hitoshi Habuka</b>	Yokohama National University, Japan
<b>Prof. Bin Hu</b>	Wuhan University, China
<b>Dr. Abubakr M. Idris</b>	King Khalid University, Saudi Arabia
<b>Dr. Muntean Edward Ioan</b>	University of Agricultural Sciences and Veterinary Medicine (USAMV) Cluj-Napoca, Romania
<b>Dr. Harald John</b>	Bundeswehr Institute of Pharmacology and Toxicology, Germany
<b>Dr. Satoshi Kaneco</b>	Mie University, Japan
<b>Prof. Do Hyun Kim</b>	Korea Advanced Institute of Science and Technology, South Korea
<b>Prof. Jilie Kong</b>	Fudan University, China
<b>Prof. Raghavendra V. Kulkarni</b>	BLDEA's College of Pharmacy, India
<b>Dr. Vanya Bogdanova Kurteva</b>	Bulgarian Academy of Sciences, Bulgaria
<b>Dr. Igor K. Lednev</b>	University at Albany, USA
<b>Dr. Kong M. Li</b>	University of Sydney, Australia
<b>Prof. Robert J. Linhardt</b>	Rensselaer Polytechnic Institute (RPI), USA
<b>Prof. Georges Lognay</b>	Gembloux Agro-Bio Tech, Belgium
<b>Dr. Rocio Maceiras-Castro</b>	University of Vigo, Spain
<b>Dr. Lijie Men</b>	Johnson & Johnson, USA
<b>Dr. Tanja Mimmo</b>	Free University of Bolzano, Italy
<b>Dr. Kingsuk Mukhopadhyay</b>	Defence Materials & Stores Research & Development Establishment, India
<b>Prof. K. Natarajan</b>	Bharathiar University, India
<b>Dr. Mu. Naushad</b>	King Saud University, Saudi Arabia
<b>Prof. Li Niu</b>	Chinese Academy of Sciences, China
<b>Dr. Hyun Gyu Park</b>	Korea Advanced Institute of Science and Technology, South Korea
<b>Prof. Tae Jung Park</b>	Chung-Ang University, South Korea
<b>Dr. Surendra Prasad</b>	University of the South Pacific, Fiji
<b>Dr. Ziyaur Rahman</b>	Food and Drug Administration, India
<b>Prof. Susana Rodríguez-Couto</b>	Unit of Environmental Engineering, Spain
<b>Dr. José Manuel Amigo Rubio</b>	University of Copenhagen, Denmark
<b>Dr. Hans Sanderson</b>	Aarhus University, Denmark
<b>Prof. Alberto Chisvert Sanía</b>	University of Valencia, Spain
<b>Dr. Rajat Sethi</b>	Texas A&M Health Science Center, USA
<b>Prof. Xuping Sun</b>	Chinese Academy of Sciences, China
<b>Dr. Yugang Sun</b>	Argonne National Laboratory, USA
<b>Dr. Eric Robert Tkaczyk</b>	University of Tartu Medical School, Estonia
<b>Prof. Ciddi Veeresham</b>	Kakatiya University, India
<b>Prof. Gavin M. Walker</b>	Queen's University Belfast, UK
<b>Prof. Thomas P. West</b>	South Dakota State University, USA
<b>Prof. Hui-Fen Wu</b>	National Sun Yat-sen University, Chinese Taipei
<b>Dr. Qingli Wu</b>	Rutgers University, USA
<b>Prof. Tangfu Xiao</b>	Chinese Academy of Sciences, China
<b>Dr. Chun Yang</b>	Nanyang Technological University, China
<b>Dr. George Zachariadis</b>	Aristotle University of Thessalonike, Greece
<b>Prof. Anyun Zhang</b>	Zhejiang University, China
<b>Prof. Jianwen Zhang</b>	Beijing University of Chemical Technology (BUCT), China
<b>Prof. Tonglai Zhang</b>	Beijing Institute of Technology, China

## Table of Contents

Volume 5    Number 17

December 2014

### **The Analysis of the Quenching Efficiency of Humic Acid Fluorescence by Cadmium and Copper Ions**

N. L. Lavrik, N. U. Mulloev.....1167

### **Quality Assessment of Common Instant Noodles Sold in Nigeria Markets**

C. T. Onyema, U. E. Ekpunobi, A. A. Edowube, S. Odinma, C. E. Sokwaibe.....1174

### **Rapid Determination of Gold during Plating Operations by Portable X-Ray Fluorescence**

B. J. Burnett, A. Giles, A. L. Anderson, T. Darger, E. Walker.....1178

### **Doping Control Analysis of 16 Non-Steroidal Anti-Inflammatory Drugs in Equine Plasma Using Liquid Chromatography-Tandem Mass Spectrometry**

Y. W. You, C. E. Uboh, F. Y. Guan, L. R. Soma.....1184

### **Molybdenum Phosphide Flakes Catalyze Hydrogen Generation in Acidic and Basic Solutions**

Z. Z. Chen, C. C. Lv, Z. B. Chen, L. H. Jin, J. Wang, Z. P. Huang.....1200

### **Use of Sequential, Single and Kinetic Extractive Schemes to Assess Cadmium (Cd) and Lead (Pb) Availability in Vietnamese Urban Soils**

N. Manouchehri, T. M. L. Nguyen, S. Besancon, L. A. Le, A. Bermond.....1214

### **Determination of Trace Amounts of Zinc, Iron and Copper by Flame Atomic Absorption after Their Preconcentration Using Sodium Dodecyl Sulfate (SDS) Coated Alumina Nanoparticles Modified with 3-Mercapto-D-Valin from Environmental Samples**

M. R. Baezzat, H. Maleki, E. Moghadamhosseyni, M. Tabandeh.....1228

### **Development and Validation of a Stability-Indicating RP-HPLC Method for Determination of Darifenacin Hydrobromide in Bulk Drugs**

M. Nazeerunnisa, L. Garikapati, S. S. Bethanabhatla.....1239

### **Development of Better-Quality Assay Method for the Citric Acid and Sodium Citrate in Ophthalmic/Oral Solutions and Their Application to Deformulation Studies**

K. K. Hotha, T. Patel, S. Roychowdhury, V. Subramanian.....1249

**Elaboration of Amorphous-Clay Hybrid: (Al<sub>2</sub>Si<sub>2</sub>O<sub>7</sub>·1/2Li<sub>2</sub>O) Designed as a Single Ion Conducting Solid Electrolyte for Li-Ion Batteries**

N. Jaafar, S. Naamen, H. B. Rhaiem, A. B. H. Amara.....1261

**Efficient Removal of La(III) and Nd(III) from Aqueous Solutions Using Carbon Nanoparticles**

A. M. Younis, A. V. Kolesnikov, A. V. Desyatov.....1273

**Linear Dependence of Balances for Non-Redox Electrolytic Systems**

A. M. Michałowska-Kaczmarczyk, T. Michałowski.....1285

**Spectrophotometric Determination of the pKa, Isosbestic Point and Equation of Absorbance vs. pH for a Universal pH Indicator**

L. E. V. Salgado, C. Vargas-Hernández.....1290

**Using Trace Metals, Peroxide, Acid and Iodine Values to Characterize Oils Bleached Using Clays from Central and Eastern Uganda**

I.-Z. Mukasa-Tebandeke, P. J. M. Ssebuwufu, S. A. Nyanzi, A. Schumann, G. W. Nyakairu, F. Lugolobi.....1302

**Syntheses and Co-Fluorescence of Complexes of Eu (III)/Gd (III) with Thienyltrifluoroacetate, Terephthalic Acid and Phenanthroline**

X. H. Zhao, Z. L. Hu, H. Y. Jiang, F. P. Jiao, Z. X. Wang.....1313

# **American Journal of Analytical Chemistry (AJAC)**

## **Journal Information**

### **SUBSCRIPTIONS**

The *American Journal of Analytical Chemistry* (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 issue.

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 © 2014 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 © 2014 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.

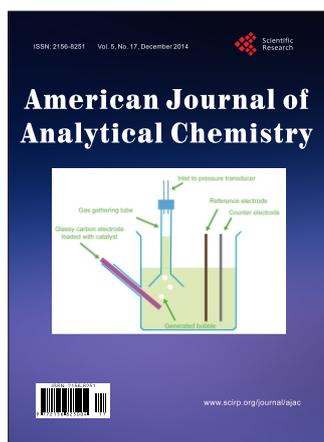
#### **DISCLAIMER OF LIABILITY**

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: [ajac@scirp.org](mailto:ajac@scirp.org)



# American Journal of Analytical Chemistry

ISSN Print: 2156-8251 ISSN Online: 2156-8278

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

**American Journal of Analytical Chemistry** is a peer reviewed international journal dedicated to the latest advancement of analytical chemistry. The goal of this journal is to keep a record of the state-of-the-art research and to promote study, research and improvement within its various specialties. With an open access publication model of this journal, all interested readers around the world can freely access articles online. Now we sincerely invite you to submit your research manuscript to **AJAC**.

## Editor-in-Chief

**Prof. Raman Venkataraman**

University of Pittsburgh, USA

## Subject Coverage

The American Journal of Analytical Chemistry publishes original papers including but not limited to the following fields:

- Analytical Chemistry Applications in Engineering
- Atomic and Molecular Spectroscopy (UV, IR, Raman, NMR, MS, Microscopy, FS)
- Chemical Sensors, Biosensors and Related Technologies
- Chemometrics
- Chemosensitive Materials
- Chromatography and Electrophoresis
- Composite Materials
- Electroanalysis and Electroanalytical Techniques
- Environmental, Clinical, Biological and Agrochemical Applications
- Environmental, Health and Forensic Analysis
- High-Throughput Screening
- Ion Exchange Materials
- Novel Extraction and Microextraction Procedures
- Sample Preparation
- Separation Techniques for Hazardous Substances
- Thermal Analysis

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 AJAC.

## 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/ajac>

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