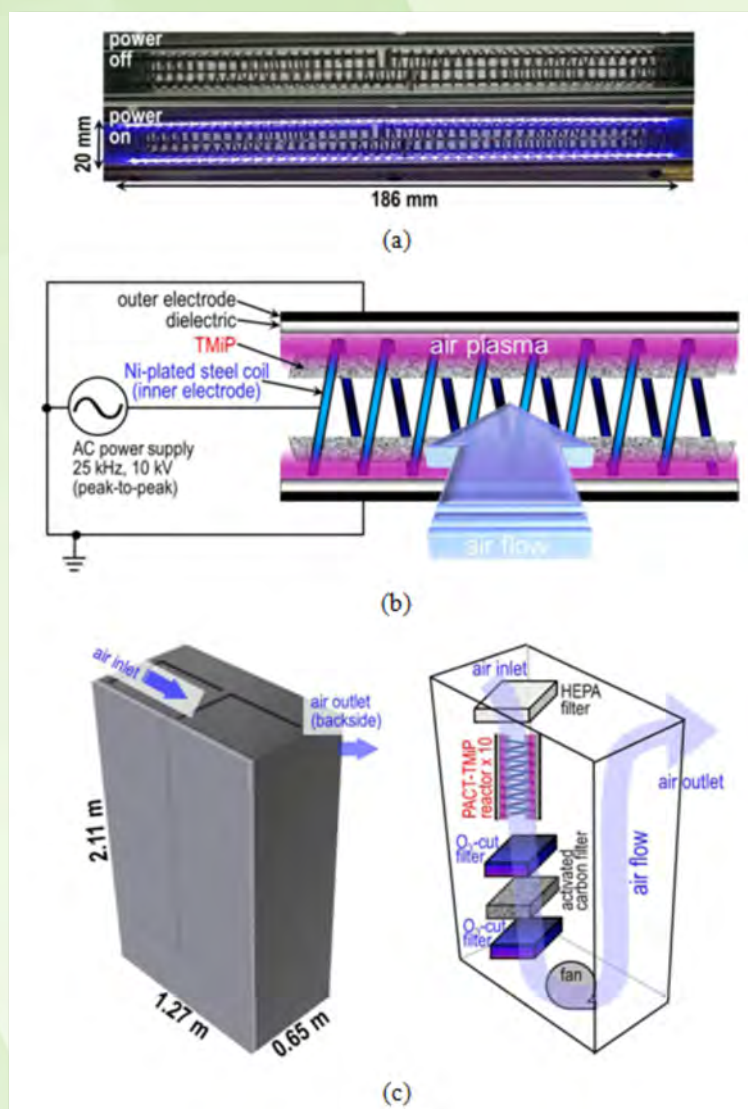




American Journal of Analytical Chemistry

Special Issue on Advances in Photocatalysis



ISSN: 2156-8251



9 772156 825004 08

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

Prof. Talal Ahmad Aburjai

Dr. Mohamed Said Attia

Prof. Doo Soo Chung

Dr. Jimmy Thomas Efird

Dr. Lizhen Gao

Dr. Gustavo Stoppa Garbellini

Prof. Hitoshi Habuka

Prof. Bin Hu

Dr. Abubakr M. Idris

Dr. Muntean Edward Ioan

Dr. Harald John

Dr. Satoshi Kaneco

Prof. Do Hyun Kim

Prof. Jilie Kong

Prof. Raghavendra V. Kulkarni

Dr. Vanya Bogdanova Kurteva

Dr. Igor K. Lednev

Dr. Kong M. Li

Prof. Robert J. Linhardt

Prof. Robert H. Lipson

Prof. Georges Lognay

Dr. Rocio Maceiras-Castro

Dr. Lijie Men

Dr. Tanja Mimmo

Dr. Kingsuk Mukhopadhyay

Prof. K. Natarajan

Dr. Mu. Naushad

Prof. Li Niu

Dr. Hyun Gyu Park

Prof. Tae Jung Park

Dr. Surendra Prasad

Dr. Ziyaar Rahman

Prof. Susana Rodríguez-Couto

Dr. José Manuel Amigo Rubio

Dr. Hans Sanderson

Prof. Alberto Chisvert Sanía

Dr. Rajat Sethi

Prof. Xuping Sun

Dr. Yugang Sun

Dr. Eric Robert Tkaczyk

Prof. Ciddi Veeresham

Prof. Gavin M. Walker

Prof. Thomas P. West

Prof. Hui-Fen Wu

Dr. Qingli Wu

Prof. Tangfu Xiao

Dr. Chun Yang

Dr. George Zachariadis

Prof. Anyun Zhang

Prof. Jianwen Zhang

Prof. Tonglai Zhang

University of Jordan, Jordan

Ain Shams University, Egypt

Seoul National University, South Korea

University of North Carolina, USA

University of Western Australia, Australia

Federal University of São Carlos (UFSCAR), Brazil

Yokohama National University, Japan

Wuhan University, China

King Khalid University, Saudi Arabia

University of Agricultural Sciences and Veterinary Medicine (USAMV) Cluj-Napoca, Romania

Bundeswehr Institute of Pharmacology and Toxicology, Germany

Mie University, Japan

Korea Advanced Institute of Science and Technology, South Korea

Fudan University, China

BLDEA's College of Pharmacy, India

Bulgarian Academy of Sciences, Bulgaria

University at Albany, USA

University of Sydney, Australia

Rensselaer Polytechnic Institute (RPI), USA

University of Victoria, Canada

Gembloux Agro-Bio Tech, Belgium

University of Vigo, Spain

Johnson & Johnson, USA

Free University of Bolzano, Italy

Defence Materials & Stores Research & Development Establishment, India

Bharathiar University, India

King Saud University, Saudi Arabia

Chinese Academy of Sciences, China

Korea Advanced Institute of Science and Technology, South Korea

Chung-Ang University, South Korea

University of the South Pacific, Fiji

Food and Drug Administration, India

Unit of Environmental Engineering, Spain

University of Copenhagen, Denmark

Aarhus University, Denmark

University of Valencia, Spain

Texas A&M Health Science Center, USA

Chinese Academy of Sciences, China

Argonne National Laboratory, USA

University of Tartu Medical School, Estonia

Kakatiya University, India

Queen's University Belfast, UK

South Dakota State University, USA

National Sun Yat-sen University, Chinese Taipei

Rutgers University, USA

Chinese Academy of Sciences, China

Nanyang Technological University, China

Aristotle University of Thessalonike, Greece

Zhejiang University, China

Beijing University of Chemical Technology (BUCT), China

Beijing Institute of Technology, China

Table of Contents

Volume 5 Number 8

June 2014

Factors Influencing the Photocatalytic Degradation of Reactive Yellow 145 by TiO₂-Coated Non-Woven Fibers

S. Alahiane, S. Qourzal, M. El Ouardi, A. Abamrane, A. Assabbane.....445

Production of Hydrogen: Photocatalytic Decomposition of Dimethyl Ether over Metal-Promoted TiO₂ Catalysts

Gy. Halasi, G. Schubert, F. Solymosi.....455

Development of a Coil-Shape Photocatalysis-Plasma Synergistic Reactor for a Practical and Long-Term Usable Air-Cleaner

T. Ochiai, Y. Hayashi, E. Ichihashi, T. Machida, Y. Uchida, S. Tago, Y. Morito, A. Fujishima.....467

Cr-Doped TiO₂ Thin Films Prepared by Means of a Magnetron Co-Sputtering Process: Photocatalytic Application

A. Hajjaji, A. Atyaoui, K. Trabelsi, M. Amlouk, L. Bousselmi, B. Bessais, M. A. El Khakani, M. Gaidi.....473

Photocatalytic Degradation of *p*-Nitrophenol (PNP) in Aqueous Suspension of TiO₂

S. Islam, S. K. Bormon, Md. Nadim, K. Hossain, A. Habib, T. S. A. Islam.....483

Heterogeneous Fenton Catalyst for the Efficient Removal of Azo Dyes in Water

M. Blanco, A. Martinez, A. Marcaide, E. Aranzabe, A. Aranzabe.....490

Investigations on the Degradation of Triazine Herbicides in Water by Photo-Fenton Process

S. Dbira, A. Bedoui, N. Bensalah.....500

A Study on the Degradation of Carbamazepine and Ibuprofen by TiO₂ & ZnO Photocatalysis upon UV/Visible-Light Irradiation

I. Georgaki, E. Vasilaki, N. Katsarakis.....518

American Journal of Analytical Chemistry (AJAC)

Journal Information

SUBSCRIPTIONS

The *American Journal of Analytical Chemistry* (Online at Scientific Research Publishing, 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

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: 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



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 Venkataramanan

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