

Volume 5, Numero 4, December 2019

University of Boumerdes
Faculty of engineering
Research Laboratory of Food Technology

ISSN : 2437-1114
EISSN : 2478-0030

ALGERIAN JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY

An International Research Journal Of Environmental Science And Technology



ALJEST



www.aljest.org

Editorial

Algerian Journal of Environmental Sciences and Technology

An International Research Journal of Environmental Sciences And Technology

<http://www.aljest.org> ALJEST Tertiary Publication

Algerian Journal of Environmental Science and Technology is an open access journal, free of charges, published three times a year by Faculty of Engineer Technology University of Boumerdes, ALGERIA. The journal is dedicated to research of all aspects of Environmental science and Technology. Authors can send their views and comments to the Editor in chief: louhab_ka@yahoo.fr

The *Algerian Journal of Environmental Science and Technology* publishes papers, in English, French and Arabic languages

Edited by: Faculty of engineering, University of Boumerdes / FSI, Frantz Fanon City, 35000 Boumerdes, Algeria
Tel/Fax: 00213 (0) 24 91 11 16

E-mail: aljest2015@yahoo.com / louhab_ka@yahoo.fr

Web: www.aljest.net

Topics:

Papers are solicited from, but not limited to the following topics:

- All aspects of Environmental physics,
- Basic and applied research on atmospheric,
- Terrestrial and aquatic environments pollution control and abatement technology, Conservation of natural resources,
- Environmental health study and toxicology,
- Environmental quality assessment,
- Environmental standards and criteria
- Environmental impact and risk assessment
- Environmental studies using Electrochemical process

Honorary Editor-in-Chief

Prof. Ahmed KETTAB (The National Polytechnic School, Algeria)

Member of the world Water council

Member of French Water Academy

Founder member of the Arab Water Council

Copyright © 2019, Algerian Journal of Environmental Science and Technology, All rights reserved

Vice president of Mediterranean network of Schools and universities of engineers - RMEI

Editor in chief

Prof. Krim LOUHAB Univ. Boumedes, Algeria
Faculty of Engineering
University of Boumerdes
DZ-35000 Boumerdes- ALGERIA
louhab_ka@yahoo.fr
aljest2015@yahoo.com
Tel/Fax : 00 213 24911117

Editorial Board

Pr. BELHANECHÉ- BENSEMRA N. (The National Polytechnic School, Algeria)
Pr. SULTAN T . ABU-ORABI. (Secretary General Association of Arab Universities, AArU)
Pr. YUH-SHAN HO. (Peking University, China)
Pr. ALWARTHAN. A. A. (Univ. King Saud, Riyadh, Saudi Arabia)
Pr. SZYMCZYK A (Univ. Rennes 1, France)
Pr. BRUZZONITI M. C (Univ. Torino, Turin, Italy)
Pr. LARACHI F. (Univ. LAVAL, Quebec, Canada)
Pr. AMRANE A. (Univ. Rennes 1, France)
Pr. DEL BUBBA M. (Univ. Firenze, Italy)
Pr. SIMONESCU C.M. (PolytechnicUniversity of Bucharest , Romania)
Pr. MALOLLARI I. (Univ. Tirana, Albania)
Pr. BOUROUIS M. (Univ. RoviraiVirgili, Spain)
Pr. SHARROUK P.J. (Univ. Paul Sabatier , Toulous, France)
Pr. MANDI L. (Univ. Cadi Ayyad, Marrakech, Morocco)
Pr. SANJA MARTINEZ. (Univ. of Zagreb, Croatia)
Pr. ZABANIOTOU N. (Univ. Aristotle, Greece)
Pr. BELBRAOUE T S. (Univ. Moncton, Canada)
Pr. EL SAYED H. EL ASHRY. (Uni. Alexandria, Egypt)
Pr. ENOS M. R. KIREMIRE.(Univ. Namibia, Windhoek, Namibia)
Pr. BENADDA B. (INSA de Lyon, France)
Pr. LOUDYI D. (Univ. Hassan II, Casablanca, Morocco)
Pr. HARMOUNI B. (Univ. El Manar, Tunisia)
Pr. TEBBAL S. (SET Laboratories TEXAS, USA)
Pr. BOUKHERROUB R. (Research Director CNRS . Univ. Lille, France)
Pr. LOULERGUE P. (Univ. Rennes 1, France)
Pr. SAFI M.(EcoleNationale d'Ingénieur, Tunis, Tunisia)
Pr. VILLEMIN D. (Univ. Caen, France)
Pr. FALAH. H .Hssein. (Univ. Bbylon, Iraq)
Pr. DAKO E. (Univ. Moncton, Canada)
Pr. OUAZZANI N. (Univ. Cadi Ayyad, Marrakech, Morocco)
Pr. ASSADI A.A. (Ecole Nationale Supérieure de Chimie of Rennes, France)
Pr. BELKACEMI K. (Univ. LAVAL, Quebec, Canada)
Pr. OULD-DRIS A. Technology University of Compiègne, France)
Pr. BOUNOUGHAZ M. (Univ. Boumerdes, Algeria)
Pr. MOHAMMEDI K. (Univ. Boumerdes, Algeria)
Pr. HACHEMI M. (Univ. Boumerdes, Algeria)
Pr. SELATNIA A. (The National Polytechnic School, Algeria)
Pr. TOUAIBIA M. (Univ. Moncton, Canada)
Pr. BENRACHEDI K. (Univ. Boumerdes, Algeria)

Pr. **CHEMANI H.** (Univ. Boumerdes, Algeria)
Pr. **AFFOUNE A.M.** (Univ. Guelma, Algeria)
Pr. **DAGHBOUCHE Y.** (Univ. Blida, Algeria)
Pr. **KHEIRDDINE H.** (Univ. Bejaia, Algeria)
Pr. **BOUTALEB A.** (Univ. HouariBoumediene/USTHB, Algeria)
Dr. **SMOLINSKA B.** (Univ. Lodz of Technology, Poland)
Dr. **MEKKI A.** (Univ. Manchester, United Kingdom UK)
Dr. **ABBEDDOU S** (International Atomic Energy Agency | Vienna International Center, Austria)
Dr. **DJELAL H.** (Ecole des Métiers de l'Environnement (EME), Bruz, France)
Dr. **SAIDAN M.** (Univ of Jordan, Amman, Jordan)
Dr. **URSZULA GURIZ.** (Univ Silesia in Katowice. Poland)
Dr. **DANA A. M.** (Univ Plymouth. United Kingdom UK)
Dr. **KORBAHTI B.K.** (Univ Mersin, Mersin, Turkey)
Dr. **KIANY D.** (Institute for international energy studies (IIES), Tehran, Iran)
Dr. **MALTINI F.** (Univ of Sheffield, United Kingdom UK)
Dr. **EL WESHAH R.** (Univ of Jordan, Amman, Jordan)
Dr. **AYAD A. H. FAISAL.** (Univ. Baghdad, Iraq)
Dr. **NASRALLAH N.** (Univ. HouariBoumediene USTHB, Algeria)
Dr. **NOUANI A.** (Univ. Boumerdes, Algeria)
Dr. **RUMOLINO C.** (Univ. Bordeaux, France)

Indexing Databases

- **UIF** / Universal Impact FactorIF : 044
- **DAIJ** / Directory of abstract indexing for Journals
- **JIF** / The Journals Impact Factor
- **DRJI** / Directory of Research Journals Indexing
- **OCLC** / World Cat
- **CiteFactor** / Academic Scientific Journals
- **ResearchBib**/ Academic Ressouece Index
- **PBN** / Polish Scholarly Bibliography
- **AcademicKeys**
- **ASJR** / American Standards for Journals and Research
- **Journal Index**
- **EZ3** / ElectronicJournals Library
- **Pak Academic Search**
- **MIAR** / (Information Matrix for the Analysis of Journals
- **ESJI** / Eurasian Scientific Journal Index

Prospective author(s) should submit their complete Manuscripts accompanied with a cover letter to: aljest2015@yahoo.com

Honorary Editor-in-Chief

Prof. Ahmed KETTAB(The National Polytechnic School, Algeria)

Editor in chief

Prof.Krim LOUHAB

Table Of Contents

-Optimization of preparation and application of activated carbon derived from cypress cones. M. Khellouf, R. Chemini, Z. Salem, M. Khodja, D. Zeriri	pp 841 /851
-Reduction of CO Emissions in the Environment by Preheating the Air in a Combustion Chamber. A. Boukhari, M.E.H. Attia, Z. Driss.....	pp 852/857
-Copper, Zinc and Nickel's removal by bentonite clay: Case study in mono and multicomponent systems. F. Hamdache, A. Chergui, F. Halet, A.R. Yeddou, B. Nadjemi.....	pp 858/867
L'importance des extraits d' <i>Urtica dioica</i> L. dans la lutte contre <i>Culex pipiens</i> (Linné, 1758). S. Toubal, Dj. Elhaddad, O. Bouchenak, K. Yahiaoui, N. Sadaoui, K. Arab	pp 868/872
-Plant Growth Promoting Rhizobacteria A review. A. Benaissa.....	pp 873/880
-Contribution à la production du biogaz à partir d'effluents d'élevage animaliers en Algérie. A. Mellak, Y. Le Roux, R. Bouarab, T. Ahmed-Zaïd.....	pp 881/889
-Experimental study of environmentally Friendly composite materials Behavior in aeronautical applications. D. Basaid, A. Benmounah, C. Aribi	pp 890/897
-Assessment of olive mill wastewaters bioconversion potential into biotechnological and health interest microbial biomass. S. Dermeche, F. Moulti-Mati.....	pp 898/908
- Water uptake of polymer/clay nanocomposites : Model development. B. Kouini, N. Ouslimani	pp 909/911
-Assessment and monitoring the quality of treated water and dialysate in a public hemodialysis center to prevent potential health risks. M.I. Mime, S. Bellebia, Z. Bengharez, M. Louni, K. Benrachedi.....	pp 912-919