



Protective Roles of Quercetin, Vitamin C and Pyridoxine on Lead Neurotoxicity via Enhanced Haematopoietic and Antioxidants Components

---

Acid Hydrolysis of Cassava Peel Waste for Ethanol Production

---

Null Controllability of Semi-Linear Differential Systems of Non Local Initial Conditions with Distributed Delays in the Control in Banach Spaces

---

Applications of Information Cryptography in Its Various Stages of Evolution, from Antiquity to the Modern Era

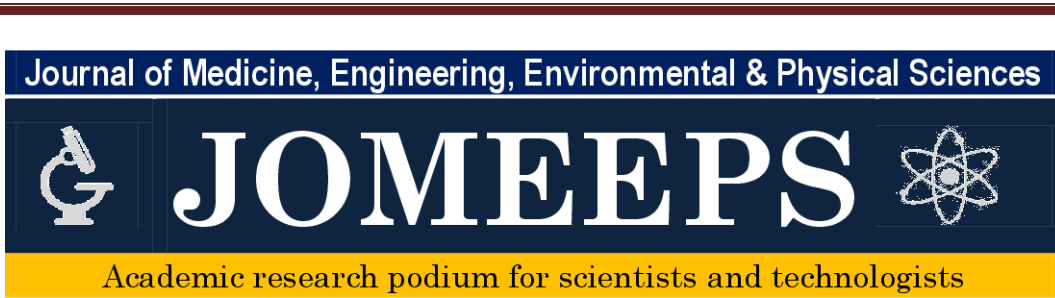
---

Use of Fenton's Reagent for Pollutants Removal in Pharmaceutical Effluent



Uniqueness of Optimal Control for the Relative Controllability of Neutral Integro-differential Systems in Banach Spaces with Distributed Delays in the Control

Appraising Landscaping in Chukwuemeka Odumegwu Ojukwu University, Uli Campus, Anambra State Nigeria



Volume 1, Number 1, June-July 2023

Published by

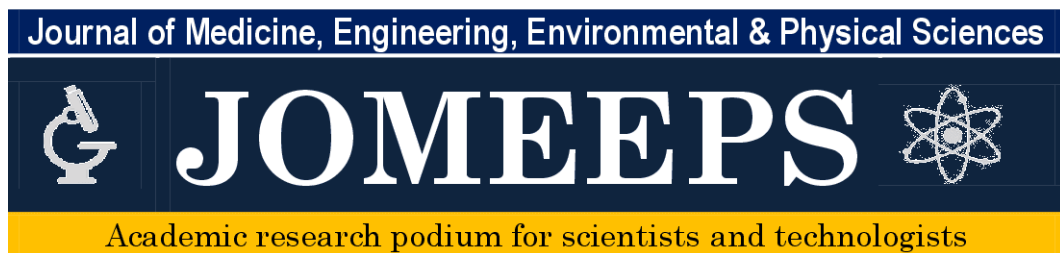
Klamidas Communications Ltd  
No 42 AJose Adeogun Street, Utako District, Abuja  
Tel: (+234) 08033370200  
Website: <https://klamidas.com/JOMEEPS>  
Email: JOMEEPS@klamidas.com  
© JOMEEPS 2023

in partnership with

The Division of General Studies  
Chukwuemeka Odumegwu Ojukwu University,  
Anambra State, Nigeria

*All Rights Reserved*

No part of this publication shall be reproduced, stored  
in a retrieval system, or transmitted in any form  
by any means electronic, magnetic, or otherwise  
without the prior permission of  
the publishers.



## **JOMEEPS Editorial Board**

### **Editor-in-Chief**

Duve Nakolisa

### **Editors**

Prof. Innocent Chijindu Ngangah

Francis Chuks Madukasi, PhD

### **Members of Editorial Advisory Board**

Prof. Federico G. Settler	University of KwaZulu-Natal, South Africa
Prof. Maduabuchi Dukor	Nnamdi Azikiwe University, Awka, Nigeria
Prof. Sarojini Nadar	University of KwaZulu-Natal, South Africa
Prof. Roderick Hewitt	University of KwaZulu-Natal, South Africa
Prof. Jacob K. Ayantayo	University of Ibadan, Ibadan, Nigeria
Prof. Chika Moore	Nnamdi Azikiwe University, Awka, Nigeria
Prof. E. Nwigwe	University of Port-Harcourt, Nigeria
Prof. Jude E. Madu	Chukwuemeka Odumegwu Ojukwu University, Nigeria
Prof. Uduma Oji Uduma	National Open University, Abakiliki, Nigeria
Prof. O.B.C.Nwankwo	Chukwuemeka Odumegwu Ojukwu University, Nigeria
Dr Nneka Ifeoma Okafor	University of Nigeria, Nsukka, Nigeria
Dr. Roseline Uzeh	University of Lagos, Lagos, Nigeria

## **About JOMEEPS Journal**

Journal of Medicine, Engineering, Environmental and Physical Sciences (JOMEEPS) is an international, open-access journal published every two months (January, March, May, July, September, and November) by the Division of General Studies, Chukwuemeka Odumegwu Ojukwu University (COOU) and Klamidas.com, a notable academic publisher and webhost. It is published at the end of the month. The publishers' goal is to enhance and encourage cross-fertilization of ideas among scientists and technologists. Other benefits include: life-time archive of published papers on JOMEEPS web pages and on Google Scholar, free plagiarism check and paper amendment advisory services, free proof-reading/editing services, and availability of share buttons on every paper contributor's JOMEEPS journal page. Website: [klamidas.com/jomeeps](https://klamidas.com/jomeeps). Submit paper to [jomeeps@klamidas.com](mailto:jomeeps@klamidas.com).

---

## **CITING ARTICLES IN THIS JOURNAL**

---

### **AMA**

Salvator NI, Finbarrs-Bello E, Ikemefuna OI, Ejuiwa MC, Ugwu V. Protective Roles of Quercetin, Vitamin C and Pyridoxine on Lead Neurotoxicity via Enhanced Haematopoietic and Antioxidants Components. *Journal of Medicine, Engineering, Environmental and Physical Sciences*, 2023;1(1): 7-22. Published July 2023. <https://klamidas.com/jomeeps-v1n1-2023-01/>

### **APA**

Salvator, N.I., Finbarrs-Bello, E., Ikemefuna, O.I., Ejuiwa, M.C., & Ugwu, V. (2023). Protective Roles of Quercetin, Vitamin C and Pyridoxine on Lead Neurotoxicity via Enhanced Haematopoietic and Antioxidants Components. *Journal of Medicine, Engineering, Environmental and Physical Sciences*, 1(1), 7-22. <https://klamidas.com/jomeeps-v1n1-2023-01/>



Vol. 1, No. 1, June-July, 2023

## Table of Contents

Protective Roles of Quercetin, Vitamin C and Pyridoxine on Lead Neurotoxicity via Enhanced Haematopoietic and Antioxidants Components	
Nnachi I. Salvator, Elizabeth Finbarrs-Bello, Ozor I. Ikemefuna, Mba C. Ejuiwa, and Vivian Ugwu	7-22
Acid Hydrolysis of Cassava Peel Waste for Ethanol Production	
Ifeoma E. Madukasi	23-30
Null Controllability of Semi-Linear Differential Systems of Non Local Initial Conditions with Distributed Delays in the Control in Banach Spaces	
Paul Anaetodike Oraekie	31-44
Applications of Information Cryptography in Its Various Stages of Evolution, from Antiquity to the Modern Era	
Nnaemeka Uchenna Ezeonyi, Obikwelu Raphael Okonkwo & Obinna Arthur Enweka	45-64

Use of Fenton's Reagent for Pollutants  
Removal in Pharmaceutical Effluent

E.I. Madukasi and O.B.Tojuola 65-72

Uniqueness of Optimal Control for the Relative  
Controllability of Neutral Integro-differential  
Systems in Banach Spaces with Distributed  
Delays in the Control

Paul Anaetodike Oraekie 73-83

Appraising Landscaping in Chukwuemeka  
Odumegwu Ojukwu University, Uli Campus,  
Anambra State Nigeria

Chukwunonso O. Umeora, Boniface S.A  
Okoye, Oluchi C. Ifebi and Chijioke C.  
Onwuzuligbo 84-93