

MUSTANSIRIYAH JOURNAL

of PURE and

APPLIED SCIENCES

The Official Journal Published by the College of Education at Mustansiriyah University

Year: 2023 Vol. 1 No. 1

Print ISSN: 2957-9910 Online ISSN: 2957-9929

Contents

- General class of Mixture of Some Densities (1-8)*
- Enhancement of TiO₂ Nanostructure for Super Capacitors Application (9-19)*
- Enhancement of Geothermal Energy in Rationalization of Electrical Power Consumption (20-29)*
- Some Bayes Estimators for Exponentiated Rayleigh Distribution under Doubly Type II Censored Data (30-39)*
- Influence of Weathering on Physical Properties and Sun Light Transmitted through PMMA/ Safranin Films for Greenhouse Applications (40-53)*
- Orthogonal Generalized Higher (σ, τ) -k Derivations on Semi-prime Γ -Rings (54-67)*
- A New Method for Color Image Encryption Using Chaotic System and DNA Encoding (68-79)*
- Pseudo-Sc-injective Modules (80-90)*
- Stress-Strength Reliability Bayesian of Generalized Exponential-Poisson Distribution for Complete Data (91-107)*
- Antibacterial Activity of Silver Nanoparticles and Lemon Peel Mixture on E-coli Bacteria (108-116)*
- People Recognition Based on Gait and Neural Network (117-132)*
- Comparison between Gait Recognizing Algorithms (133-139)*
- Linear Formulas for Estimating the Reliability of Generalized Inverse Weibull Distribution (140-154)*
- Deposition Fe₂O₃ doping Barium Ferrites Thin Films on Glass without Annealing and Study their Microwave Properties (155-163)*
- Two Doubly Truncated Semicircular Distributions: Some Important Properties (164-174)*

رقم الايداع فى دار الكتب والوثائق الوطنية

2522 فى 2022

Editorial Page

Mustansiriyah journal of pure and applied sciences (MJPAS) (**Print ISSN: 2957-9910. Online ISSN: 2957-9929**) is published by Mustansiriyah University in Iraq.

The original Mustansiriya Madrasah was established in 1227 (or 1232/34 A.D. by some accounts) by the Abbassi Calipha Al-Mustansir and was one of the oldest universities in the world. Its building, on the left bank of the Tigris River, survived the Mongol invasion of 1258 and has been restored.

The modern Mustansiriyah University was established with the help and financial support of the Republic of Iraq Teacher's Union in 1963, mainly providing evening courses. In 1964, the university was given the status of a semi-state institution and some state financial support. At the same time it absorbed Al-Sha'ab University, another private university that had been founded by the Iraq Association of Economists, and then moved to a new campus to the north of the city centre. Initially, the university also managed colleges in Mosul and Basra.

In 1966 a law was passed under which the private universities were converted into public universities. Mustansiriyah thus became, briefly, a college within the University of Baghdad. In 1967 a major reorganisation of higher education was initiated, with the intention that by 1969 all previous institutions would be abolished and reconstituted. Mustansiriyah was designated as a separate University in 1968, and its branch campuses were detached to form part of the University of Mosul and the University of Basra.

Mustansiriyah journal of pure and applied sciences (MJPAS) is a specialized journal in science and its applications. The topics related to this journal include but are not limited to; Mathematics and statistics, Physics, Computer Sciences, Chemistry, Biology, Climate and Environmental Sciences and Geology.

All correspondence regarding MJPAS should be addressed to the Administrative Officer, MJPAS Room, Mustansiriyah University, and Baghdad, Iraq. Email: mjpas@uomustansiriyah.edu.iq.

The editor welcomes preliminary inquiries about manuscripts for possible publication in MJPAS. Completed manuscripts should be sent to the managing editor, Iman F. Mohammed. Everything should be double-spaced, including extracts, notes, and references. Because manuscripts cannot be returned, please do not send the original. Consult recent issues of *the Journal* and Instructions for authors as a guide to the format for source citations, notes, and references. All manuscripts submitted to *the* MJPAS are expected not to have been published elsewhere and not to be under review for possible publication elsewhere. Manuscripts, including notes, should not be more than 20 pages in length.

The Journal's production arrangements with the University of Baghdad Press make it possible to illustrate articles with tables, figures, and black-and-white photographs more easily than in the past. Authors in all fields are encouraged to submit illustrations along with their manuscripts if the need arises. Final acceptance of illustrated manuscripts will be conditional on receiving good-quality photographs for reproduction. Please provide a separate typewritten, double-spaced list of captions and legends for all illustrations, keyed by number to each figure or photograph, including all necessary credit and permission lines. Authors are responsible for securing and paying for permission to use illustrative material.

Do not write anything on the back of photographs; do not paste photographs to sheets of paper. Identify each photo by typing the first words of its caption on a stick-on label, and then affix the label gently but firmly to the back of the photo. Photographs will be returned after publication.

The journal accepts book reviews, letters to the editor, and comments on published papers and publishes conferences proceedings.

The editor is responsible for the final selection of the content of the Journal and reserves the right to reject any material deemed inappropriate for publication. Responsibility for opinions

expressed and for the accuracy of facts published in articles rests solely with the individual authors.

Requests for permission to reprint should be directed to the editor in chief Salah H. Abid, Email: abidsalah@uomustansiriyah.edu.iq

COPYRIGHT©2022 BY Mustansiriyah University, P.O. Box: 14022, Baghdad, Iraq

All Rights Reserved

Editor-in-Chief

Professor Salah H Abid (PhD)

Education College, Mustansiriyah University, Baghdad, Iraq

abidsalah@uomustansiriyah.edu.iq

abidsalah@gmail.com

Managing Editor

Eman F Mohammed

Education College, Mustansiriyah University, Baghdad, Iraq

emanfateh@uomustansiriyah.edu.iq

Editorial Board:

1. B K S Alobaidi, Biosciences Institute, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, UK.
2. Salah M. Mahmoud, National Research Institute of Astronomy and Geophysics (NRIAG) Ministry of Scientific Research Helwan, Cairo, Egypt.
3. Abdulrazak F. Shahatha, Azman Hashim International Business School, Universiti Teknologi Malaysia.
4. Abeer R. H. Abdelhalim, Madina, Saudi Arabia.
5. Haslinda Ibrahim, School of Quantitative Sciences, College of Arts and Sciences, Universiti Utara Malaysia 06010 Sintok, Kedah, Malaysia.
6. Nader F. Habobi, Physics Department, College of Education, Mustansiriyah University, Iraq.
7. Raid Kamel Naji. Department of Mathematics, College of Science, University of Baghdad, Jadriyah, Baghdad, Iraq.
8. Fadhel M. Lafta, Biology Department, College of science, Baghdad University, Iraq.
9. Ban Abdulrazzaq, Geological Department, College of Science, Baghdad University, Iraq.
10. Baraa A. Atteya, Computer Sciences Department, College of Science, Baghdad University, Iraq.
11. Mohammed A. Mohammed, Chemistry Department, College of Pharmacy, Mustansiriyah University, Iraq.
12. Akram N. Sadiq, Physics Department, College of Science, Baghdad University, Iraq.
13. Makki A. Saleh, Mathematics Department, College of Education, Mustansiriyah University, Iraq.
14. Jaffar H. Eddie, Mathematics Department, College of Education, Mustansiriyah University, Iraq.