Sirte University Scientific Journal (SUSJ)



(Periodical Academic Refereed)

Applied Sciences

Volume 9, Issue No. 2, December 2019

General Director

Prof. Ahmed F. Mahgoub

Editor in Chief

Dr. Abdalsalam M. Muftah

Editorial Board

Dr. Hamid M. Younis Dr. Soliman M. Alshater Dr. Algaddafi S. Alpotte Dr. Khalifa M. Fadil

Abdalmawla A.Ali Dr. Abobaker Eljilani Abobaker

Sirte University Scientific Journal

Post Box 674 Sirte, Libya

Tel: 00218545265704-1178

Fax:00218545262152-1178

Email: susj@su.edu.ly

Sirte University Scientific Journal (SUSJ)

A scientific refereed journal issued on behalf of Sirte University in a number of issues throughout the year interested in publishing research and documented studies in the field of humanities and applied sciences for university faculty members and other universities from inside and outside Libya.

The views expressed in the publication are the individual opinion of the author(s) and they neither represents nor reflect the opinion of the editor and editorial board or Sirte University.

The University reserves all copyright and, no re-print or publication of the whole or parts of the journal is allowed without prior permission.

Sirte University Scientific Journal (SUSJ)

Paper Submission

- Sirte University Scientific Journal (SUSJ) is referred journal issued by the Sirte University in the fields of humanities and applied sciences in English.
- The submission file is in Microsoft Word (2007 or later version) file format and should be submitted electronically as e-mail attachments along with four hard copies to the editor of the SUSJ at susj@su.edu.ly.
- Papers should be approximately up to 20 pages long (including tables, figure, references and appendixes).
- Manuscripts submitted to SUSJ must contain original work which has been neither previously published, nor is it under consideration by another journal.
- All papers should have an abstract of about 200 words in length.
- Authors should include the full title of the paper, the author's full name, Author's affiliation and address, e-mail address.
- Each paper should be 1.5-spaced in 12 point font (Times New Roman) with 2.5 inch margins on all sides. The headlines and sub-headlines should be in 14 point font.
- Editors of SUSJ reserve the right to make editorial changes in any manuscript accepted for publication for the sake of style or clarity. Authors will be consulted only if the changes are substantial.
- Arabic numbers and the international units system should be used.
- Tables, figures and pictures should appear after the reference list.
- Mathematical equations should appear in a sequential order and should be numbered between brackets ().
- Author/s must pay all the expenses incurred in the review process if s/he decides to withdraw his/her research paper whilst it is undergoing review.

• Author/s will be provided with a copy of the journal.

 References should be cited as they appear in the text, enclose the citation number in square brackets, for example [1].and the full reference should be

included in the reference list as follows:

Journals/periodicals:

Surname, initials of the first and second name, title, place of publication,

volume and issue number and pages numbers.

Review Procedure

After the submission, manuscripts submitted to SUSJ will go through an internal

review. If submitted papers meet the basic requirements of SUSJ they are sent out for double blind review from experts in the field. It is common for reviewers who

recommend acceptance to also make this conditional on addressing possible errors

or issues. If your reviewers make this recommendation then you will be given the

opportunity to adequately respond to their feedback by a required date. Authors are

required must make all the changes suggested by reviewers and they should send a

detailed report indicating the changes made in the paper to SUSJ.

Submission and Publication Acceptance Agreements

Papers submitted to SUSJ for review and possible publication will not have been

submitted for review anywhere else and, if accepted for review, will not be

submitted elsewhere whilst the paper is undergoing review. The authors of papers

accepted for Review will be asked to fill out, sign and return a submission

agreement to this effect. The authors of those papers accepted for publication will also be asked to confirm in an publication acceptance agreement that the paper has

not been and will not be published elsewhere. Publication in SUSJ transfers the right

to SUSJ to distribute papers, but authors do retain their copyright.

Authors should send their papers to:

Editor in Chief of Sirte University Scientific Journal

Sirte University, Sirte – Libya

or E-mail: susj@su.edu.ly

IV

Sirte University Scientific Journal

General Director's Word

In the name of Allah The Most Gracious The Most Merciful

All praise be to Allah and peace and Blessings be upon the Prophet Muhammed

Sirte University Scientific Journal is an official refereed journal. It published peer-reviewed research in the fields of humanities and applied sciences.

As one of its mission has been to improve the scientific research in order to broaden the people's knowledge and serve the local community, and since the scientific research has been widely recognized as of one of the main standards on which universities' performances and contributions are assessed in all over the world, we had to do our upmost to ensure the publication of the 2^{ed} issuance of 9th volume- Dec. 2019) which includes the humanity and sciences volumes.

It is worth mentioning that the SUSJ, in a very short time and with very limited resources, has made significant and tangible achievements, namely, the spearheading of research culture, exchanging of expertise, boosting the spirit of cooperation and encouraging researcher to publish their valuable research papers in different scientific fields.



As the University's President and the General Director of the journal, I am so delighted to present you with the current edition of the journal. It is also my great pleasure to extend my gratitude to the University's faculty members, graduate students, researchers and reviewers who have all contributed in the publication of this issue and hoping that the editorial board has selected the most valuable research papers to be published in this edition. I should mention here that we, very much, welcome any comments and/or suggestions which could help in improving the next editions.

Finally, I commend all the hard work and efforts exerted by the Editorial Board and to all people who have contributed, directly or indirectly, in bringing this issue into life.

Peace be upon you

The General Director

Sirte University Scientific Journal

Editor in Chief's Word

In the name of Allah The Most Gracious The Most Merciful

It remains my great honour to serve as Editor-in-Chief of the Sirte University Scientific Journal (SUSJ), and it is my pleasure to take this opportunity to thank everyone involved in the continuing success of the journal, and we would never have made it this far without the enthusiasm and assistance of the journal's Editorial Board, and its readers. There are two special groups who are also included in the above, our referees and our authors. Without the referees' valuable comments, the quality of the papers would not be as high as it is. Without the authors' choice of SUSJ in which to publish their best work, the journal's contribution to our community simply would not be as great as it is. It is also thanks to the hard work of both our authors and our referees that our publications enable all our readers to keep up with the latest developments within our sphere of research as early as possible.

We look forward to your most serious and effective efforts, which aspire members of the editorial board and its general director, also aspire to the university in the dissemination of scientific research in all fields of human and applied sciences.



Although every effort has been made to make this journal errors-free and as scientific as possible, no work is perfect and this journal is not an exception. Therefore, we appreciate it if you could give us your feedback, suggestions and ideas in order to improve the next issues.

May Pease be Upon You

Editor in Chief

Table of Contents	Page
Sunscreen Cream Formulation with Natural Ingredients, including Arabic gum and Beeswax Foundation Fathia A. Mosa and Randah O. Makhlouf	1-11
CFD Simulation and Optimization of 4-Digit NACA Airfoils Abdalsalam Muftah	12-30
Active Control of Surge Compressor System (Stigmatopelia Senegalensis) Khalafullah A. Husayn	<i>31</i> -45
Case Report of Gingivitis Artefacta in Libyan Female Child 5-Years Old <i>Khyria Dhaw Omar</i>	46–51
Certain Subclass of Meromorphic Valent Functions Defined by Convolution with Positive Coefficients A. A. Hussain, A. O. Mostafa and M. K. Aouf	52–66
Crystallisation of Pectate Lyase 10A Catalytic Module From Cellvibrio japonicas Muftah Omar Ali	67–75
Behavior of Gas-Liquid Mixture in a Downward <i>Orientation of Vertical Pipe Almabrok Abushanaf Almabrok</i>	76–84
Experimental Investigation of Cyclic Solvents Injection to Enhance the Production in Heavy Oil Reservoirs Mohammed Mansour	85–95
Potentials and Prospects of Numerical Investigation of the Thermal Efficiency Optimization in Radiant Tube Burners <i>E. M. Elmabrouk, Imhamed M. Saleh and Mohamed A saad</i>	96–105
Effect of Three Organic Materials on Soil Soluble Cations in Calcareous Soil H. Abd alrahman, H. Makhlof, A.Sanousi and M.Hussien	106–114
The Role of Ultrasound in The Diagnoses of Graves' Disease F. M. Shembesh, M. E. Buzgheia, F. M. Kutrani, N. F. Ben Jeweref, N. M. Elbagermi, S. A. Salem.	115-124
Oscillation Theorems for Nonlinear Second Order Forced Differential Equations. Ambarka A. Salhin	125-138