



Articles in Press

Journal Archive

Volume 4 (2018)

- Issue 2
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Volume 3 (2017)

Volume 2 (2014)

Welcome

It is a pleasure to take over the responsibility as an Editor in Chief to develop the Scientific Journal of October 6 University (SJO6U). This multidisciplinary, open access, peer-reviewed journal covers 3 main categories, medical, engineering and social sciences.

Why SJO6U? This question has been asked and I have a responsibility to answer. October 6 University (O6U) is in October 6 City that is a new but large industrial city, now hosting 7 million population. It has few Universities, 2 medical schools but no scientific journal. There is no scientific bridge to connect academics and professionals. That is why SJO6U came to fill this gap. Also, it is the first journal of a private University in Egypt to publish medical research and scientific studies.

It is an opportunity to tell you about the 24 years of achievements since the start of October 6 University. It was established in the year 1996 and it is the first and largest private University in Egypt. O6U was ranked by QS among the top 100 Universities in the Arab region in 2016.

The University has 13 faculties including medical sciences, engineering, and humanities. The University has a teaching hospital and has a library that comprises > 100 international databases available through the Egyptian Knowledge Bank with 200 scientific journals, eighty thousand publications, books, and theses.

The student body reaches an average of 23,000 students. O6U has agreements with regional and international universities, like the University of Fontys in the Netherlands and Chung Chou University of Science and Technology and Cleveland Clinic Foundation, USA. Most agreements foster student and faculty exchange.

its own international conference in arthroplasty, for which O6U invited more than 120 professors and doctors worldwide. The abstracts and some selected papers will be published in our proceedings. Moreover, the University has 457 papers published in Scopus and many international books. For example, one single paper by one of our medical staff has more than 1000 citations.

Prof. Gamal Samy

Most Visited Articles

- واقع التكلم والتدريب الإلكتروني في المملكة العربية السعودية: خيار استراتيجي لتحقيق التطلعات الوطنية واستشراف المستقبل
- Improvement of Productivity Using Tromp Curve Measurement for Cement Separator Processing Technology
- التقود الإلكترونية وأثرها على المعاملات المالية : دراسة تقنية واقتصادية
- Using Information Technology for Enhancing Sustainable Tourism in Egypt
- A Simplified Approach for Water Hammer Analysis

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Comparison of Biochemical effects of glibenclamide and some trace elements on experimental diabetic rats

Pages 1-7

Suzan Shawky; Samy A Abdel-Aziz; Hassan A. Amer; Ismail I. Hegazy; Mohammed A Hussein

View Article PDF 357.84 K

Rutin Ameliorates Acrylamide-Induced Hepatotoxicity and Biochemical Disturbance in Male Albino Rats

Pages 8-13

Mahgoub M Ahmed; Ibrahim M Ibrahim Laila

View Article PDF 486.47 K

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## About Journal

The scientific journal of October 6 University is the first journal of a private university to publish research and scientific studies, and take the reasons for the promotion of scientific research. It is linked to other publications of other universities by extending the bridges of cooperation in the fields of culture and knowledge, and creating points of cooperation between them and their peers About universities, scientific institutions and other scientific research centers. The magazine is published in Arabic and English in three areas of knowledge.

### Open access:

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## Aims and Scope

Scientific Journal of October 6 University (SJO6U) is a multidisciplinary, open access, peer-reviewed journal covers almost all fields of medical, engineering and social sciences. The aim of SJO6U is to serve as a means for updating the scientific knowledge of the international audience in the different areas of science. The Journal welcomes the original research articles, review, short communications and case studies relevant to the various fields such as Pharmaceutical Sciences as medical, engineering, computer sciences and humanities.

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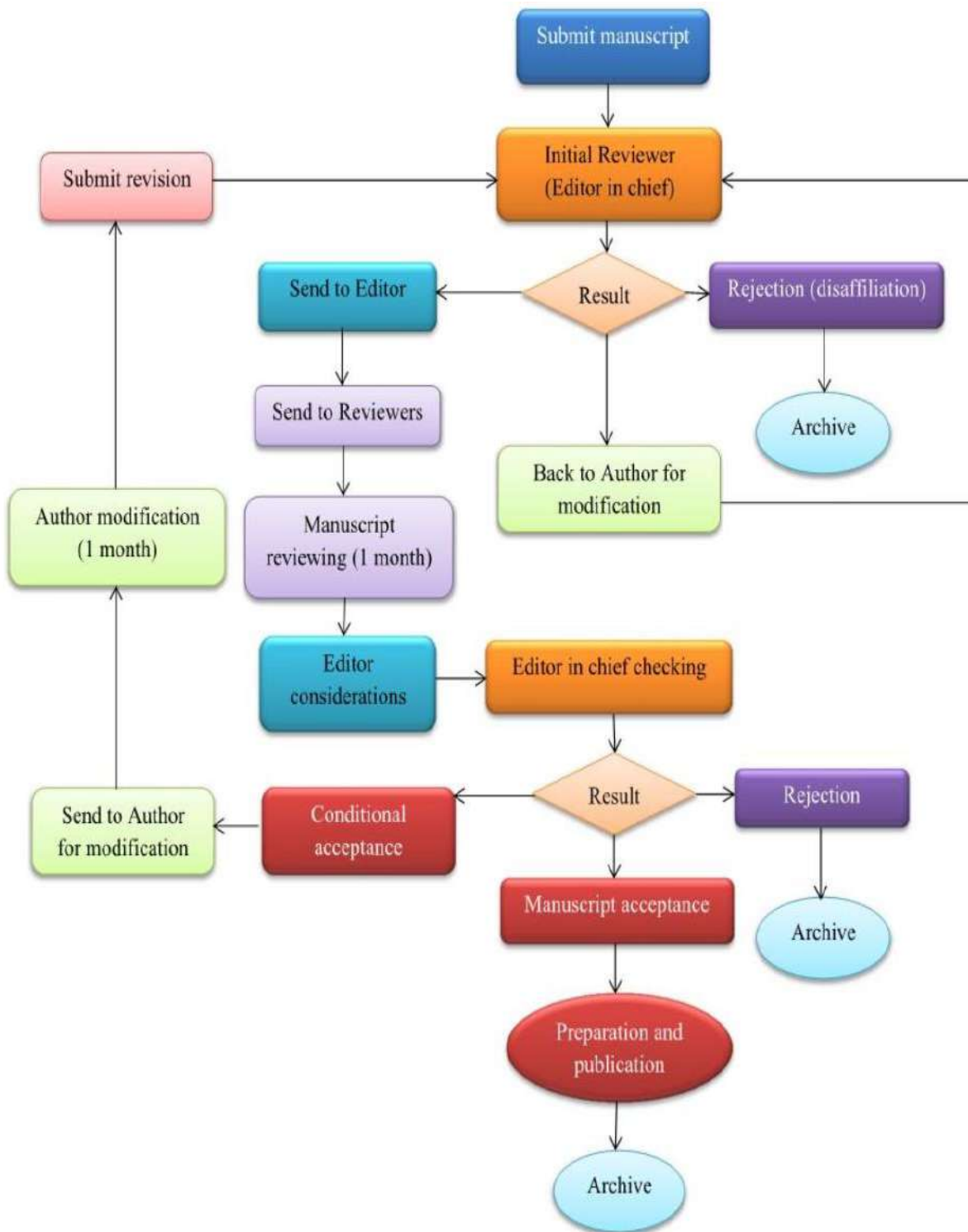
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## Guide for Authors

Tutorial Videos  
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Editor Guide Video

### Author Guidelines

The journal invites the contribution of a high standard of scientific articles in all Medical, engineering, computer sciences and humanities fields on the basis of its originality, importance, multidisciplinary interest, timeliness, accessibility, elegance and surprising conclusions.

#### a)- Medical Sciences Sector:

The Journal publishes original research relevant to any innovative field of in Medicine, Community medicine, Aerospace medicine, Dentistry, Forensic Science, Surgery, Orthopedic, Neurology, Neonatal and pediatrics, Histology, Nuclear medicine, Anesthesia and analgesia, Systems biology, Diabetology, Dermatology, Cardiology, Hematology, Pathology, Obstetrics and Gynecology, Nephrology, Medical Ethics, Medical Education, Radiology, Medical Virology, Head and neck surgery Biochemistry, Genomics, Biotechnology, Pharmacology, Bacteriology, Physiotherapy, Biomechanics, Bioinformatics Hematology, Immunology, Cellular, Tissue, and Genetic Engineering, Cytology, Microbiology, Molecular biology. In addition, pharmaceuticals, pharmaceutical, analytical and medicinal chemistry and drug discovery ranging from target discovery to preclinical studies. Areas of particular interests include target discovery and validation, drug design, virtual screening, molecular modeling, drug-receptor interactions; organic synthesis of bioactive compounds, natural products chemistry, bioassay method development, molecular insights to drug action and metabolism; prodrug synthesis and drug targeting.

#### b)- Engineering and computer Sciences Sector:

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#### c)- Humanities Sciences Sector:

Scientific Journal of October 6 University (SJO6U) is an emerging and promising discipline in all fields of Linguistics Theoretical and Applied, Arts and Letters comparison, philosophical studies, Economics and Management, Social Studies related to humanities, historical studies, media, mass communication, studies archaeological (and interventions that address criticism and research problems related branches Humanities and questions central, as well as those that reflect controversy undecided scientists about what is published in the magazine from a variety of contributions.

Authors are kindly requested to adhere to the following rules:

#### Research articles

Full-length original research articles should describe new, original and significant research findings. The normal length of the main text of an original Paper, excluding references, tables, figures, and figure legends, is about 3,000 words. In exceptional and well-justified cases longer manuscripts may be accepted.

#### 2. Short communications

Short communications include the articles intended for the publication of exceptionally significant, new, original but complete small investigation results, such as unusual bioactivities, details of new models or hypotheses, innovative methods, techniques or apparatus that deserve rapid publication as a short communication. It must be in the format of a full-length original research article. The normal length of the main text of short communication, excluding references, tables, figures, and figure legends, is about 1,200 words.

#### 3. Review articles

They should be as concise as possible and do not need to include experimental details. The main purpose of reviews is to provide a concise, accurate introduction to the subject matter and inform the reader critically of the latest developments in this area. Expert reviews under the scope of Medicinal chemistry & Drug Discovery are welcomed. Reviews should contain an abstract, and 4-6 keywords should be listed.

Manuscripts including tables and figures should be presented in duplicate.

1. Manuscript should be clearly typewritten on one side only of quarto (A4) paper, with double spacing and sample margins of not less than one inch.

#### Abstract

Summary of the results and conclusion of between 200-300 words. Each manuscript must include up to 6 keywords for classification and indexing purpose.

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Including a brief review of the relevant literature, especially that bearing on the inferences or arguments presented in the discussion.

#### Material and Methods

Should contain enough detail so that other workers can repeat the procedure.

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Should be clear and concise inferences belonging to the discussion should not be included.

#### Discussions

Inferences and arguments drawn from the result are presented here. Results should not be mentioned or recapitulate here.

Conclusion (s): If not included in the discussion.

#### Acknowledgments

Acknowledgments, as well as funding resources, may be stated at the end of articles.

#### References

References must be listed at the end of the manuscript and numbered in the order that they appear in the text. Every reference referred in the text must also present in the reference list and vice versa. In the text, citations should be indicated by Harvard system (Name and year; Smith, 1996; Brown et al., 1998)

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#### 2. Illustrations:

a- All graphs, drawing and photographs should be referred to as figures (abbreviated Fig.), and should be numbered in sequence and the orientation indicated by the arrow.

b- Graphs should be plotted on separate, plain white paper.

c- Graphs should be clear, colored and printed on glossy paper

d- Photographs should be submitted individually as original colour prints. A second copy may be presented as mounted prints.

e- Legends should be short (two lines), numbered and typed on a separate paper.

#### 3- Tables and Histograms:

Should be typed on separate sheets at the end of the paper. Their positions in the text should be indicated by a note in the margin.

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Original Article

## Comparison of Biochemical effects of glibenclamide and some trace elements on experimental diabetic rats

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### Abstract

The present work was done to elucidate the possible protective and antidiabetic effect of chromium chloride (Cr) (500 mg/k.g.), sodium selenite (Se) (1.5 mg/k.g.) and Zinc sulphate (Zn) (54 mg/k.g.) supplementation in streptozotocin induced diabetic rats. Oral administration of both Cr<sup>+3</sup> and Zn<sup>+2</sup> as well as intraperitoneal injection of Se<sup>-2</sup> at concentrations of 500, 1.5 and 54 mg/kg b.w. daily, respectively for 60 days showed a significant decrease in fasting blood. The treatment also resulted in a significant increase in plasma C-peptide and trace elements Cr<sup>+3</sup> and Zn<sup>+2</sup> and Se<sup>-2</sup>. The trace elements exerted rapid protective effects against lipid peroxidation by scavenging of free radicals by reducing the risk of diabetic complications.

**Key Words:** Glucose, diabetic rats, Cr<sup>+3</sup> and Zn<sup>+2</sup> and Se<sup>-2</sup>, C-peptide.

### Introduction

Trace elements have been identified for long time as potential candidates for improving metabolic disorders like pre diabetes [insulin resistance, obesity, metabolic syndrome] or diabetes (Devirgillis, *et al.*, 2007). In parallel with increasing comprehension of cellular and biochemical mechanisms leading aggravating these metabolic disorders, identifying the cellular targets and sites of action of trace elements has reactivated interest in their therapeutic potential (Rungby., 2010). Activation of insulin receptor signalling (chromium), antioxidant properties (selenium, zinc) thus appeared promising in view of the key importance of these processes in glucose homeostasis and insulin sensitivity. Insulin receptor/postreceptor signalling defects are considered to underlie glycemic dysregulation and insulin resistance (Abdul-Ghani and defronzo., 2010).

Chromium is an essential element involved in the regulation of blood glucose levels within the body (Guerrero and Rodriguez, 2005). It is believed to interact with the low-molecular weight chromium

(LMWCr) binding substance to amplify the action of insulin. Today, the use of chromium as a dietary supplement for the treatment of diabetes mellitus type 2 (Cefalu and Hu, 2004).

Chromium acts as a potential regulator of glucose metabolism. The experimenters subjected the rats to a chromium deficient diet, and witnessed an inability of the organisms to respond effectively to increased levels of glucose within the blood (Lipko,*et al.*, 2002). They then included "acid-hydrolyzed porcine kidney and Brewer's yeast" in the diet of these rats, and found that the rats were now able to effectively metabolize glucose (Lewicki *et al.*, 2005). Both the porcine kidney and Brewer's yeast were rich in chromium, and so it was from these findings that began the study of chromium as a regulator of blood glucose (Balk,*et al.*, 2007).

Experimental evidence from animal models suggests that supplementation with low doses of the antioxidant selenium may exert beneficial effects on glucose metabolism, possibly through many insulin-like actions, and may delay

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