

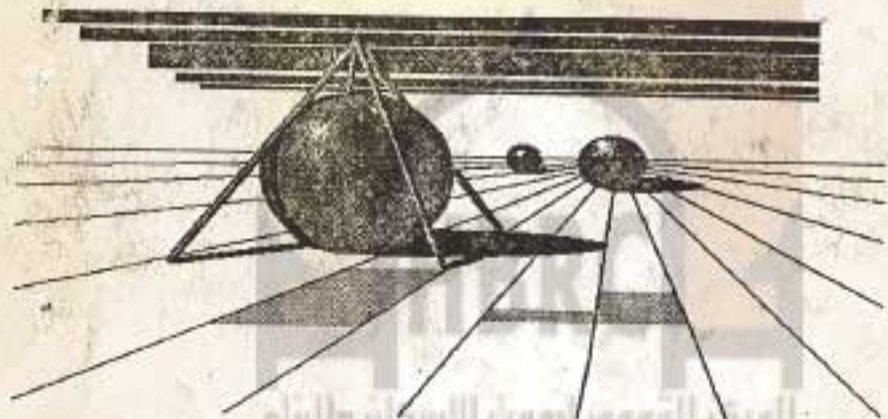
Sci. Bull. Fac. Eng. Ain Shams Univ.
ISSN 1110 - 1385

C4745



AIN SHAMS UNIVERSITY

FACULTY OF ENGINEERING



SCIENTIFIC BULLETIN

SINCE 1954

Vol. 31, No. 1, March 31, 1996
Part II : *Electrical and Mechanical Engineering*
Physics and Mathematics

مكتبة
الجامعة
الشمسية

C 4740

31/7/1997

Sci Bull Fac. Eng. Ain Shams Univ.
ISSN 1110-1385



2 A 6

مكتبة

AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING

SCIENTIFIC BULLETIN

EDITORIAL BOARD

- 1- Prof. Mohamed El-Niazi Hamad
- 2- Prof. Mohamed Abdel-Hamid Sheirah (Chief Editor)
- 3- Prof. Salah El-Din Mohamed El-Mahdy
- 4- Prof. Saad Kamel Massoud
- 5- Prof. Ali Kamel El-Kharashi
- 6- Prof. Abdel-Hady Hosny Hassan
- 7- Prof. Mohamed Zaki Hawas
- 8- Prof. Ali Mohamed Talact (Co_Editor)

Prices Per Volume excluding mail postage:

Individuals:	Egypt	Overseas
Authors	15 LE	15 US \$
Non-Authors	30 LE	30 US \$
Societies:	40 LE	40 US \$

Faculty of Engineering
Post Office 11517, Ahabassin
Cairo, Egypt

Tel : (202)2826636/7
Telex : 94070 USHAMS U
Fax : (202) 285-0617

GUIDE FOR THE PREPARATION OF MANUSCRIPTS TO PROSPECTIVE AUTHORS FOR THE SCIENTIFIC BULLETIN

A- OBJECTIVES

The Bulletin aims at the development of knowledge in the field of engineering, technology and related sciences. All innovative, valuable and useful articles as research or review papers or reports will be regarded. In order to guarantee the highest possible standard, the received articles are rigorously refereed. However, articles that have been published before or which were submitted for publication in another magazine will not be considered.

B- GUIDELINES

1. **Language** : English or Arabic
2. **Typescript** : The complete paper should be camera-ready, laser-typed, single-sided with double-line spacing, five-space paragraph indentation, on standard A4 size paper. The Times New Roman is the preferred font for use. 25 mm margin is to be left on the four sides of the page.
3. **Number of copies** : For the purposes of refereeing and editing, the original and three copies of the paper are required. The referees will receive unidentified copies.
4. **Length** : The fee will account for a maximum of 15 pages. Additional pages are charged as per page. All pages must be numbered.

C- CONTENTS

The first page of the article should include :

- A title consisting of a maximum of 10 words in bold capital letters (18 pt font) and centered.
- The authors names (14 pt font) followed by their affiliations and present addresses should be centered under the title.
- Indexing terms (12 pt font) containing a maximum of six key words indicating the area of the paper.

- An abstract of not more than 100 words (14 pt font) in the same language of the text to give the summary of the main contents of the paper. This should give a clear and concise view of the state-of-the-art and motivation of the subject, an outline of the paper and its contribution. The abstract should not include any references.
- A translation in the other language.
The following pages should include :
- A list of the used symbols, acronyms, etc.
- An introduction explaining the nature of the study, previous work, purpose and contribution of the paper.
- The text of the article suitably itemized.
- Conclusions indicating advantages, limitations and possible applications.
- Mathematical equations typewritten leaving double-spaces on either side and using the SI units.
- Drawing computer- designed made using India ink on transparent or white paper. Lettering must be typewritten or written by template.
- Tables should be typewritten in serial with clear headlines and should not be a repetition of any information that has appeared somewhere else in the article.

Table of Contents

PART I

Architecture and Civil Engineering

	Page
1- Analysis Of Reinforced Concrete Shear Walls With Openings Mostafa K. M. Zidan, Mohamed M. H. Attabi and Ashraf A. M. Abu Kracha	1
2- Optimum Location and Proportioning of Bracing Systems in Multi-Storey Frameworks for Maximum Buckling Strength Mohamed Saad Raslan	26
3- Introducing and Potential of Geographic Information Systems (GIS) in Transportation Planning in Egypt Ahmed Hamdy Ghareib	44
4- Discovering The Blunders in The Egyptian Gravity Networks Using Least Squares Collocation Mohamed E. A. El-Tekhey and Hussein A. Abd-Elmotaal	62
5- Friction Losses in Uniform Multiple Outlet Pipes Farouk A. El-Fitany	72
6- Effect of Herding-Up and Permanent Storage on Canal Discharge Farouk A. El-Fitany	89
7- Local Scour Downstream of Circular Culverts Elazy Abdelhalek Ibrahim, Essam Aly Abdel-Hafiz and Ali Mohamed Talat	105
8- Sediment Transport in The Surf Zone Farouk M. Abdel-Aal	120
9- Stability of Alluvial Channels Farouk M. Abdel-Aal	133
10- Impact of Wastewater Discharges on Phytoplanktonic Structure of The Nile River Sohair I. Abou-Elkela, Salwa A. Shelata and Aly N. El-Bahrawy	148

PART II

Electrical and Mechanical Engineering, Physics and Mathematics

11- Critical heat For Forced And Natural Flow of Water in Vertical Annuli at Uniform And Nonuniform Axial Flux Distribution G. M. Zaki and A. M. Al-Turki	168
12- A Distributed Real-Time Transaction Processing Environment For The CIM Applications Y. Dakrouy and J. P. Elloy	191
13- Cost Effective Parallel Processors Assignment Approach (CDPA) Aida O. Abd El-Gwad, Salwa M. Nasser and Rasha E. Tawhid	204
14- Expert System For Business Administration Myahya A. Ibrahim, Hany Harb and Mohamed Z. Abd-Elmegid	219
15- Adaptive Intelligent Agent: A Design Approach For a Decision Support System Mohamed A. Salem, Nabil A. El-Nady and Osman A. Badr	234
16- Analytical And Experimental Study For A Control System of Sapv Systems A. mamoun, M. S. Abdel-Motaleb and H. El-Khashab	258
17- New Technique For The Stability Analysis of Digital Controlled Electric Power Systems A. H. Amer	271
18- Optimal Control of Double Output Induction Generator Using Optimal Regulator Theory M. N. Eskander, M. S. Abd-El-Motaleb and H. A. El-Khashab	284
19- Consolidation of Rapidly Solidified Tial-Powder By Cerason Process M. A. Zamzam	295