

MSE



ISSN (Print): 2413-5267 ISSN (Online): 2706-9966

## Volume 8, issue 1 (June-2022)

Editor-in-Chief Prof. Dr. Moustafa E. Elsharif (Alasmarya Islamic University, Libya)

Managing Editor Assoc. Prof. Dr. Aly Y. Okasha (Alasmarya Islamic University, Libya)

Editing General Supervisor Assoc. Prof. Dr. Hesham G. Ibrahim (Alasmarya Islamic University, Libya)

#### **Associate Editors**

Assoc. Prof. Dr. Khaled Ahmed Alfallous (Alasmarya Islamic University, Libya) Assist. Prof. Dr. Ali A. Abu Hamra (Alasmarya Islamic University, Libya) Assist. Prof. Dr. Jamal S. Haider (Alasmarya Islamic University, Libya) Assist. Prof. Dr. Abdusalam Imhmed Al Khwaji (Alasmarya Islamic University, Libya)

#### Scientific Advisory Committee

Prof. Dr. Abdulsalam M. Methnani (Wadi Elshati University, Libya)
Prof. Dr. Mohamed A. Elsaidi (SRCEST, Libya)
Prof. Dr. Abdelhafid A. Moussa (University of Omar Al-Mukhtar, Libya)
Prof. Dr. Mohamed Abdel Galil Ahmed Abdel Aal (Damietta University, Egypt)
Prof. Dr. Altaher Ibrahim Altabet (University of Tripoli, Libya)
Prof. Dr. Salahaldiyn Al-Fitouri Qashout (Marine Biology Research Center, Libya)
Prof. Dr. Ahmed Elaabid H. Mohammed (SUST, Sudan)
Prof. Dr. Esmail A. Shakman (University of Tripoli, Libya)
Prof. Dr. Hassan Al Hussein Abu Arabiya (Elmergib University, Libya)
Prof. Dr. Ayman Mohamed M. Nahrawi (AASTMT, Egypt)
Prof. Dr. Hassan Ali Haweel (National Mining Corporation, Libya)

Journal of Marine Sciences and Environmental Technologies (JMSET) is a biannually scientific referred periodical international journal.

**Published by;** 

Faculty of Marine Resources Alasmarya Islamic University Zliten City-Libya

Legal Deposit Number: 402/2019, National Book House, Benghazi, Libya.

ISSN (Print): 2413-5267 ISSN (Online): 2706-9966

### Arab Impact Factor (AIF) 2021 (1.955)

Arab Impact Factor (AIF) 2020 (2.01)

Arab Impact Factor (AIF) 2019 (1.7)

Arab Impact Factor (AIF) 2018 (1.6)

Arab Impact Factor (AIF) 2017 (1.6)

http://arabimpactfactor.com

The correspondence should be sent to the following address:

Dr. Director of the editorial board Journal of Marine Sciences and Environmental Technologies Faculty of Marine Resources, Alasmarya Islamic University Zliten Teaching Hospital Road, Beside Sports City Zliten, Libya PO Box 50 Zliten Fax: + 218514628034 E-mail: jmset.editor@gmail.com or jmsetg@asmarya.edu.ly

© Copyright 2022 by Faculty of Marine Resources, Alasmarya Islamic University, Zliten City, Libya.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means electronic, photocopying or otherwise, without the prior written permission of the copyright holders.

All the contents of this journal reflect the views of the authors and do not necessarily reflect the views of the editorial board or the university. Researchers bear full legal responsibility for what is presented in their researches.



## Foreword

Journal of Marine Sciences and Environmental Technologies (JMSET) is a scientific refereed periodical international journal (ISSN-Print: 2413-5267; and ISSN-Online: 2706-9966). It is issued by the Faculty of Marine Resources at Alasmarya Islamic University, in accordance with the resolution of the Council of Alasmarya Islamic University (253/2015). JMSET endeavors to provide a notable and discern forum to publish research manuscripts of high quality relevant to a wider area of marine science and environmental topics. JMSET is a multidisciplinary journal covering a wide area of subjects of marine science and environmental technologies to promotes insight and understanding of the state of the art, and trends in the environment, engineering, and marine sciences.

This volume 8 and issue 1 (June, 2022) contains eleven diversified scientific contributions (manuscripts) which are blindly peer-reviewed by members of JMSET editorial, and reviewers panel to ensure optimum standards. We hope these papers will be helpful for imparting advanced knowledge to the researchers, academics, and technologists who are involved in research, teaching, and practical fields. The issue covers a broad range of topics in the field of marine science, and techniques of environmental impacts. During the past six years with the efforts of all members of the Editorial and Evaluation Board, we are pleased to announce that the Journal received the Arab Impact Factor for the year 2021 (1.955). Consequently, the impact factor of the journal has increased over the past years. In this regard, we can only congratulate ourselves and you on this achievement, and we promise you that efforts will be made to enter the International Scientific Impact Factor (ISI).

We want to express our heartfelt thanks to the Authors for submitting their work and also to the distinguished members of the editorial board, reviewers, and the publication committee who have put their relentless effort to publish the issue successfully. We believe this issue reflects the topic focus of JMSET and provides resources to the research community. We believe our authors will be continuously supporting and relying on JMSET to publish quality research works.

*Prof. Dr. Mustafa E. Alsharif* Editor-in-Chief, JMSET

# **Call for Manuscripts**

Journal of Marine Sciences and Environmental Technologies is a peer-reviewed journal, published by the Faculty of Marine Resources, Alasmarya Islamic University. The journal publishes research papers in the fields of;

#### Marine Science;

The journal draws from diverse topics within the major disciplines of coastal and blue water oceanography (biological, chemical, geological, and physical) as well as subjects in ecology, conservation, and technological developments with the marine environment as the unifying theme. Also, all branches of engineering related to marine such as (offshore & marine explore, mechanical, naval architecture and corrosion... etc.).

#### **Environmental Technologies;**

JMSET covers all sorts of researches in the field of environmental technologies (management, assessment, monitoring, and treatment) of atmospheric environment, the aquatic environment, and municipal solid waste...etc.

We are seeking submissions for forthcoming issues. The paper should be written in professional English. The length of 3000-8000 words is preferred. All manuscripts should be prepared in MS-word format and submitted to the Managing Editor's e-mail.

#### **Publication Process**

- Upon receipt of paper submission, the Editor sends an E-mail of confirmation to the corresponding author within 1-3 working days. If you fail to receive this confirmation, your submission/e-mail may be missed. Please contact the Editor in time for that.
- Peer review. We use a double-blind system for peer-review, both reviews and authors' identities remain anonymous. The paper will be peer-reviewed by three experts, one is an editorial staff and the other two are external reviewers. The review process may take 2-3 weeks.
- Notification of the results of the review by E-mail to the authors to revise the paper.
- After publication, the corresponding author will receive one copy of the printed journal and one soft copy of the journal, free of charge.
- -

#### **Requirements and Copyrights**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other languages, without the written content of the Publisher. The Editors reserve the right to edit or otherwise alter all contributions, but authors will receive proofs for approval before publication.

Copyrights for articles published in JMSET journal are retained by the authors, with first publication rights granted to the journal. The journal/publisher is not responsible for subsequent uses of the work. It is the author's responsibility to bring an infringement action if so desired by the author.

#### **More Information**

Contact with Managing Editor

E-mail: jmset.editor@gmail.com or jmsetg@asmarya.edu.ly

## Preface

Issue 1 of volume 8, includes the contributions from the following categories: (Ichthyology, Parasitology, Marine pollution, Ports & Marine Transportation, Floating structures, Welding engineering, Geology, Oil pollution, Seaport management, Recycling, and Oncology).

The eleven manuscripts in this JMSET Journal (Volume 8, Issue No. 1) present an in-depth discussion on the latest field of Marine and Applied Science. The first research paper presented X-Ray Radiological Study of Skeleton of Rounded Fantail Stingray Taeniura grabata from Susah, Libya. The second research paper is concerned with studying of the Blood Parasites of Toads (Amietophrynus regularis) in Al-Sorojia and Jebel Aulia, Khartoum State, Sudan. The third research paper included Determining Pollution Level for the Marine Environment Using the Pollution Load Index. While the fourth research paper showed the Relationship between the Green Port Concept and Competitiveness (A Comparative Applied Study for the Port of Tripoli). The fifth research paper focused on an Analytical Approach for the Estimation of Wave Transmission Coefficient for  $\Pi$ -Shaped Floating. The sixth research paper included A Review of Cold Cracking Phenomenon in High Strength Steel Welded Joints, Causes, and Cures. The seventh paper is concerned with the Study of the Porosity of Carbonate Rocks (Lidam Formation) Using Well Logs, Al-Hamid Field, Sirte Sedimentary Basin, Libya. The eighth paper discussed Environmental and Health Problems Associated with Oil and Gas Production in the Oil Crescent and Southeastern regions of Libya. The ninth research paper concerns Analyzing the Competitive Position of Container Terminal Using SWOT Analysis (Case Study). The tenth research paper introduced the Evaluation of the Effect of Cement Dust Addition on Some Characteristics of Portland Cement. The final eleventh research paper discussed Types of Tumors at the National Cancer Institute, Misurata, and Knowing the Age Groups Most Affected in The Central Region of Libya.

#### JMSET Editorial Board

# Contents

X-Ray Radiological Study for Skeleton of Rounded Fantail Stingray <i>Taeniura grabata</i> from Susah, Libya.	E01-15
Esam M. K. Buzaid.	
Blood Parasites of Toads ( <i>Amietophrynus regularis</i> ) in Al-Sorojia and Jebel Aulia, Khartoum State, Sudan.	E16-24
Ola Ahmed El-aabid Hamad Mohamed and Omran Fadl Osman.	
Determining Pollution Level for the Marine Environment Using the	
Pollution Load Index.	E25-31
Khadija S. ELhariri, Mohamed S. Hamouda, and Mariam M. ELmughrbe.	
The Relationship between the Green Port Concept and Competitiveness (A Comparative Applied Study for the Port of Tripoli).	E32-44
Ezzeldeen Elfarsi, Amr Ekram, Wesam Elkwafi, and Ahmed Ismail.	
Analytical Approach for Estimation of Wave Transmission Coefficient for	
Π-Shaped Floating Breakwater.	<b>E45-68</b>
Abubaker Alamailes.	
A Review on Cold Cracking Phenomenon in High Strength Steel Welded	
Joints, Causes, and Cures.	E69-76
Abdalla S. Ahmed Tawengi.	
Study of the Porosity of Carbonate Rocks (Lidam Formation) Using Well	A01-16
Logs, Al-Hamid Field, Sirte Sedimentary Basin, Libya. Abdulsalam M. Al-Mishkhi, Abdullah M. Al Hili, Mohamed R. Bin Qamo,	A01-10
Abdulsalam M. Al-Mishkii, Abdulian M. Al-Hill, Mohamed R. Bin Qamo, Abdulsalam S. Abu Jubeira, and Noah A. Shamata.	
Environmental and Health Problems Associated with Oil and Gas	
Production in the Oil Crescent and Southeastern regions Libya.	A17-34
Saleh Emhanna, Salem Elsakran, and Ali Attia.	
Analyzing the Competitive Position of Container Terminal Using SWOT	
Analysis (Case Study)	A35-54
Ashraf Ali Qardash, Faleh Abdelrahman Alfaleh, Saud Hathal Alsuaybi, Abobker A. Ghajom,	
and Ahmed Ismail.	

#### Evaluation of the Effect of Cement Dust Addition on Some Characteristics of Portland Cement.

A55-62

Osamah A. Algahwaji, Ibrahim M. Haram, Abdullbasit H. Salim, and Ahmed A. Dakheel.

# Studying the Types of Tumors at the National Cancer Institute, Misurata,<br/>and Knowing the Age Groups Most Affected in The Central Region of<br/>Libya.A63-73

Kamel S. Azzam, Mohamed B. Benmusa, and Aysha Fauzi A. Samad.