

## CURRICULUM VITA

### 1. PERSONAL INFORMATION

**Name:** Amr Zakaria Mohamad Hamouda.

**Date of Birth:** 11 April, 1964.

**Nationality:** Egyptian

**Passport No.:** A17866705

**Affiliation:** National Institute of Oceanography and Fisheries.

**Title:** President of Marine Hazards Mitigation Center

**Address**

*Home:* El-Nakl wel Handasa str., Somoha , Alexandria, Egypt

*Work:* Kayet Bey, El Anfoshi, Alexandria, Egypt.

**Phone No.:**

*Home:* +20 3 5856127

*Office:* +20 3 4807138 or +20 3 4807140

*Mobile:* +2010 6620230

**Fax:** 02 03 4834367

**Email:** [amreu@yahoo.com](mailto:amreu@yahoo.com) & [amr@niof-eg.com](mailto:amr@niof-eg.com)

**Web Site:** <http://www.amrzakaria.eg.net/>

**Marital status:** Married with two children.

**Language:** Arabic & English



### 2. POSITIONS

- President of Marine Hazards Mitigation Center – NIOF (2024 --)
- President of National Institute of Oceanography and Fisheries (2020-2024).
- Vice chairperson of IOC-UNESCO (2023 – 2025)
- Chair of Tsunamis and Other Hazards related to Sea Level Warning and Mitigation Systems (IOC - UNESCO) (2025 --)

- **Vice Chair of NEAM TWS Tsunami Early Warning and Mitigation Systems (IOC-UNESCO)**
- **Focal point for IOC and Tsunami early warning system in Egypt.**
- Head of marine geophysics department (2014-2020).
- Assistant of President of the Academy of Scientific Research and Technology for National Projects (2013).
- Secretary of the General Secretariat of the scientific committees for promotions own Institutes and Research centers (2012).
- Professor Dr. - in Marine Geology and Geophysics, National Institute of Oceanography and Fisheries, Division of Marine Environment, Mediterranean Branch Alexandria, Egypt (2011).
- Minister Advisor of at Ministry of Higher Education & State Ministry for Scientific Research, Minister Office (2007).
- Member of Strategic Planning and Technical Support Center at Ministry of Higher Education & State Ministry for Scientific Research, Minister Office (2007).
- Chairman of Information and Decision Support Center of National Institute of Oceanography and Fisheries (2006).
- Asst. Professor - in Marine Geology and Geophysics, National Institute of Oceanography and Fisheries, Division of Marine Environment, Mediterranean Branch Alexandria, Egypt (2006).
- Emeritus, General Secretary of National Institute of Oceanography and Fisheries (2005 – 2006).
- Researcher - in Marine Geology and Geophysics, National Institute of Oceanography and Fisheries, Division of Marine Environment, Mediterranean Branch Alexandria, Egypt (2001).

### **3. EDUCATION**

- Ph.D. in Geology (Geophysics), Alexandria University, 2000. Thesis: "Study of Neotectonics in the Gulf of Aqaba, Red Sea, as revealed from Marine Geophysical Data".

- M.Sc. in Geophysics, Tanta University, 1994. Thesis: "Goelectric Exploration, Evaluation of the Aquifer parameters and its Hydrochemistry in the North of Wadi El-Natrun, Western Desert, Egypt".
- Postgraduate courses for M. Sc. 1991, Tanta University, Grad: Excellent.
- Diploma of Higher Studies in Applied Geophysics, Alexandria University, 1987, Grad: Distinction.
- B.Sc. in Geology, Alexandria University, 1985, Grad: Very Good.

#### **4. EXPERIANCES**

My research life started by focusing on different geophysical techniques such as, started by Geoelectrical exploration to detect the underground water and the relation between the variation of the hydrochemistry of ground water and its influence on the geoelectrical resistivity measurements. From 1993 my research started to be more specific on marine geophysics such as; sea bed classification, sediments transport, shore protection, tsunamagenic earthquakes including the structural development related to tectonic processes along convergent margins. My experiences also including the processing, inversion, and modeling of wave propagation. Recently, the active underway research projects are to prepare seabed classification maps and detecting the impact of the climate change on the biodiversity along Egyptian Coast.

In the Field of Education; Teaching marine geophysics courses (Post graduate Course- 2005-2006) for M.Sc. Students at the Physical department, Alexandria University, and for (graduated course-3<sup>rd</sup> level- 2010-2011), Alexandria University.

Experience in putting strategy of the Research and Development Program for High Level Policy Makers; So, I shared in putting different strategies such as: (i) The strategy of research development of Egypt in marine aquaculture and Fisheries which accepted from the Egyptian Higher Council of the Scientific Research and Technology, 2007. (ii) The strategy of research development of Egypt in Renewable Energy which accepted from the Egyptian Higher Council of the Scientific Research and Technology, 2007. (iii) The strategy of Scientific Research Development of National Institute of Oceanography and Fisheries 2007-2012.

Experience in organizing the scientific workshops and conferences; as well as dissemination of scientific activities and cooperation in and outside Egypt.

## 5. ACTIVITIES

### *A- Statement of teaching experience*

- 1- Give a lecture on the characteristics of the Eastern harbor area, to build an aquarium. For the 4<sup>th</sup> grad students, Faculty of Engineering, Alexandria university (2006/2007).
- 2- Assignment to teach ancient magnetic for the 3<sup>rd</sup> grad students of geophysics department, Faculty of sciences, Alexandria University (2006/2007).
- 3- Assignment to teach ancient magnetic for the Masters students of geophysics department, Faculty of sciences, Alexandria University (2006/2007).
- 4- Assignment to teach marine geophysics for the 3<sup>rd</sup> grad students of petroleum geophysics program, Faculty of sciences, Alexandria University (2010/2011).

### *b- Committee:*

- 1- Technical committee member to assess the current situation on the nature of the fish cages in the Nile River and its branches – Ministry of Agriculture decree no. 573 for year (2006).
- 2- Member of the committee formed by the president of the Institute to meet the governor of the Red Sea to negotiate in order to preserve the right of the residential units in the Hurgada branch (2006).
- 3- Head and Supervisor of the information center, support and decision making (2006).
- 4- Member of the strategic planning and technical support center for the minister's office, ministry of scientific research. (2006).
- 5- Member in the special committee to examine the applications submitted by the specialists that had the Master degree in all the institute branches and divisions (2007).
- 6- Member of the committee formed by the scientific research under the chair ship of prof. Dr. Mohamed Attia Shereadah, president of NIOF, to meet the governor , investors and the president of the High Dam Lake development Authority, to study the conflict aspects on the fishing areas (2008).
- 7- Participate in the special committee to make an environmental study for the eastern harbor area and the castle in Alexandria, and to study the sedimentation methods in the eastern harbor (2008).

- 8- Representative of the Ministry of scientific research meetings to discuss aspects of coordination in the European-Egyptian partnership agreement. On the main requirements for the development and implementation of the Integrated Maritime Policy in the Mediterranean Sea – at the Ministry of Foreign Affairs (2009).
- 9- Coordinator of the committee formed by the Egyptian side to cooperate with the Cypriot side in the field of scientific research (2009).
- 10- Member of the committee formed within the framework of the Japanese – Egyptian cooperation in the scientific research field and renewable energy (2009).
- 11- Representative of the Ministry of scientific research in the national program of environmental monitoring with all the national research institutes following the ministry (2009).
- 12- Member of the German – Egyptian committee for renewable energy and environmental protection (2009).
- 13- Member of the national committee that formed from the president of the nuclear stations Authority for generating electricity, to study the possibility for accepting El-Dabaa area to build new nuclear station (2009).
- 14- Member of the national committee for Education, Science and Culture UNESCO for the promotion of the international UNESCO committee for oceanography (2010).
- 15- Member of Planning and studies Center – Academy of Scientific Research (2010).
- 16- Coordinating committee member of crisis and disaster risk reduction, for the preparation of an integrated project monitoring and early warning of tsunami waves in the Mediterranean Sea (2010).
- 17- Representative of the ministry in the coordination between the ministry of scientific research and the Egyptian general authority for shore protection (2010).
- 18- Member of the standing committee of the Egyptian Archeology formed by the Ministerial decree no. 422 dated 19/9/2010, (2011).
- 19- Secretary of the General Secretariat of the scientific committees for promotions own Institutes and Research centers (2012).

***c - Professional member ship***

- 1- Scientific Committee on Ocean Research "SCOR". <http://www.scor-int.org>.
- 2- American Geophysical Union, "AGU". <http://sites.agu.org/>
- 3- OceanExpert (or the *Global Directory of Marine (and Freshwater) Professionals*: <http://www.iode.org/oceanexpert>
- 4- Multidisciplinary Center for Earthquake Engineering Research. (MCEER). <http://mceer.buffalo.edu>.
- 5- Computational Infrastructure for Geodynamics (CIG), San Francisco, USA. <http://www.geodynamics.org/>
- 6- Ridge 2000 is an interdisciplinary initiative to study Earth's oceanic spreading ridge system: <http://www.ridge2000.org/science/index.php>.
- 7- Egyptian Geophysical Society (EGS), Faculty of Science, Cairo University, Egypt.
- 8- Scientific Profession Syndicate, Cairo, Egypt. Egyptian Society of Applied Petrophysics, Egypt.

## 6. PROJECTS

- 1- Hydrochemical studies of Wadi El-Natron Depression (1987-1989), through ground water field research of Chemical Modern Building Company (CMB).
- 2- Geoelectrical study and research of underground water using different electrical methods in the northern part of Wadi El-Natron, (1990-1991).
- 3- Well logging drill and Measurements (resistivity, gamma, and neutron) of the Delta area, (1992).
- 4- Seismological study of Dahshur earthquake aftershocks, Oct., 1992 to Aug., 1993, work done under the Egyptian Geological Survey.
- 5- Participating in the study of Neotectonics setting of the Red Sea Region and Qena-Safaga district area, (Oct., 1993- May, 1994).
- 6- Participating in the Earthquake Hazard studies of Delta Area, (Oct., 1994- April, 1995) in cooperation with the Egyptian Geological Survey Team (EGSMA) in Inshas Project.
- 7- Participating in the international cooperation between Jordan, Saudi Arabia and Egypt, RELEMR project (Reducing Earthquake losses in the Eastern Mediterranean Region) for detecting earthquakes activity in the Gulf of Aqaba, (Aug. 1995- Dec. 1996).

- 8- Exploratory work for ground water, Industrial Zone, 2nd sector, Nagib Textile Company, (1997).
- 9- Member of Research Team of the National Institute of Oceanography and Fisheries (NIOF) in the Feasibility Study (Geotechnical) of the Construction of Marine offshore and onshore Platform at El-Dekhila Harbor for the Middle East Oil Tankage & Pipeline (MED TAP) Company, (Jan. 1997- Aug. 1998).
- 10- Participating in the fieldwork to choose the location and installing device of digital seismological stations (National Egyptian Seismological Network Project) in cooperation with the National Research Team of the Institute of Astronomy and Geophysics, Egypt, (Aug. 1998- Feb. 1999).
- 11- Participating in the Cruise of the German Research Vessel Meteor (Leg no. 44/3) for Marine Geophysical Study in the Gulf of Aqaba and in the northern Red Sea with German Scientific Group, under the impact of the climate change on the biodiversity of the Gulf program (March 1999- July 1999).
- 12- Geoelectric study and research of underground water, by using different electrical methods in Borg El-Arab (Second New Industrial Town), Sept. 1999- May 2000.
- 13- Geotechnical Engineering Study (within the Cairo Univ. Team) in the Dahab City along the Gulf of Aqaba. (Oct. 2000- Jul. 2001).
- 14- Participating in Shipboard Kaiyo Survey Vessel with the Team of Hydrographic Department, Japan Coast Guard for Hydrographic and Geophysical Research in Southern part of Japan Sea (from 11 to 19 January, 2002).
- 15- Participating in the Scientific work on “Water use and GeoModel” (European Project) with the Scientific German Group of Kiel University in the field of the Environmental Geophysical Investigations, (Aug. 2002 to Oct. 2002).
- 16- Participating in the National Programme of Action (NPA), following to the Ministry of State for Environmental Affairs Egyptian Environmental Affairs Agency (EEAA) and the United Nations Environment Program (UNEP), for the protection of the marine Environment from land-based activities within the Red Sea in Egypt. (Jun, 2003).
- 17- Participating in the project of Environmental Studies of Amer Field Area, Ras-Gharib Region, Gulf of Suez, Submitted to Maridive Offshore Projects (MOP), (August, 2003).
- 18- Participating in the Development of an Information System for Monitoring and Integrated Management of the Nile Delta Coastal Zone, Sponsored by the FAO ICAMS Nile Delta Project No. TCP/EGY/0167), (2003).



- 19- Member in the Team of Senior National Experts nominate by Environmental Affairs Egyptian Environmental Affairs Agency (EEAA) for the Preparation of Sectoral and National Action Plans to address Land-Based Pollution in the Mediterranean Sea which organized by the United Nations Environment Program (UNEP), (24 February, 2004).
- 20- Principal Investigator of Offshore Benthic Survey of Gas Field old Platform Area and the suggested location of a new Platform. Project for Rashid Petroleum Company (RASHPETCO), (March 2004).
- 21- Principal Investigator of the NIOF Team for the EIA study for the 2 D Seismic Survey, carried out by INDUSTRIJA NAFTE ZAGREB NAFTAPLIN INA`S in East Yidma Concession, Western Desert, (June 2004).
- 22- Participate on the the impact of the climate change on the biodiversity program at the Development Ministry Workers of Union Arab Emirate country, October 7-12, 2004.
- 23- Principal Investigator of the NIOF Team for the Seismic hazard assessment studies for the Engineering of the Petroleum and Process Industries Company (Enppi) in project MRQ No. 3053-200, GPC, S-C BAKR New Platform Project, and Subject: R.F.Q. No: 3053-200- 391-1-Q, for: Platform & Pipe Line Met-Ocean Design Data, (March 2005).
- 24- Principal Investigator of the NIOF Team for the Environmental studies for the Engineering of the Petroleum and Process Industries Company (Enppi) in project MRQ No. 3053-200, GPC, S-C BAKR New Platform Project, and Subject: R.F.Q. No: 3053-200- 391-1-Q, for: Platform & Pipe Line Met-Ocean Design Data, (March 2005).
- 25- Principal Investigator of the NIOF Team for the Evaluation of the Solid Growth studies for the Engineering of the Petroleum and Process Industries Company (Enppi) in project MRQ No. 3053-200, GPC, S-C BAKR New Platform Project, Gulf of Suez, and Subject: R.F.Q. No: 3053-200- 391-1-Q, for: Platform & Pipe Line Met-Ocean Design Data, (March 2005).
- 26- Principal Investigator of the NIOF Team for the Environmental studies for Gulf of Suez Petroleum Company (GUPCO) in project LPO No. 37285/2005, for Morgan and Badri Fields, Gulf of Suez, (April 2005).
- 27- Principal Investigator of the NIOF Team for the Environmental studies, Sea Bed Classification and Shore protection for Abou Qir Electrical Station, Gulf of Abou Qir,( August 2005).
- 28- Member in the Resources Requested From The Challenge Program on Water and Food. Start from August 2005 for four years, Naser Lake.



- 29- Principal Investigator of the NIOF Team for the wave kinematics factor, the studies for the Engineering of the Petroleum and Process Industries Company (Enppi) in project No. 7654L491 of Rosetta Plat, (March-2006).
- 30- Principal Investigator of the NIOF Team for the sea bed Classification and water Quality in Damietta Branch, (April, 2006).
- 31- Principal Investigator of the NIOF Team for the Offshore Benthic Survey of Gas Field Development Phase III in the Front of Delta Concession submitted for Rashid Petroleum Company (RASHPETCO), (August 2006).
- 32- Principal Investigator of the NIOF Team for the Environmental Impact Studies for Mariut Lake submitted to Petroleum Development Service Company (PDSC), (2006).
- 33- Principal Investigator of the NIOF Team for the climate change on the coral reef at Jemsa Bay, Red Sea, submitted to Kuwait Company, (2006).
- 34- Principal Investigator of the NIOF Team for the evaluation of the Impact of fish cages at Damietta Branch, submitted to Damietta Governor, (2006).
- 35- Principal Investigator of the NIOF Team for the evaluation of the seismic hazards for all the platforms at the Gulf of Suez submitted to Gupco Petroleum Company, (2007).
- 36- Principal Investigator of the NIOF Team for the benthic studies for all the platforms at the Gulf of Suez submitted to Gupco Petroleum Company, (2007).
- 37- Principal Investigator of the NIOF Team for the environmental studies around all the platforms at the Gulf of Suez submitted to Gupco Petroleum Company, (2007).
- 38- Principal Investigator of the NIOF Team for the evaluation of the Impact of new construction platforms on marine environment at Gabel El Zeit submitted to Petrojet Petroleum Company, (2007).
- 39- Principal Investigator of the NIOF Team for the environmental studies at Marieut Lake (1000 feddan) submitted to Service Petroleum Company, (2007).
- 40- Principal Investigator of the NIOF Team for the environmental studies at Abu-Qir Bay submitted to Abu-Qir Electricity Company, (2007).
- 41- Principal Investigator of the NIOF Team for the detection of the extension of the margin wadi of the Naser Lakes submitted to fish marketing Company, (2008).
- 42- Principal Investigator of the NIOF Team for the benthic study for new construction of pipeline At Rosetta submitted to Burullus Petroleum Company, (2008).

- 43- Principal Investigator of the NIOF Team for the Environmental study for evaluation of the amount of Drainage to Mariute Lake submitted to Environment Authority, (2008).
- 44- Principal Investigator of the NIOF Team for the benthic study for North Sequoia Concession in front of the Delta submitted to Rosetta Petroleum Company, (2008).
- 45- Principal Investigator of the NIOF Team for the benthic study for South Sequoia Concession in front of the Delta submitted to Rosetta Petroleum Company, (2008).
- 46- Principal Investigator of the NIOF Team for the benthic study for Ras El-Bar Concession in front of the Delta submitted to British Petroleum Company, (2009).
- 47- Principal Investigator of the NIOF Team for the benthic study for Burullus Concession in front of the Delta submitted to British Petroleum Company, (2009).
- 48- Principal Investigator of the NIOF Team for the benthic study for North El-Burg Concession in front of the Delta submitted to British Petroleum Company, (2009).
- 49- Principal Investigator of the NIOF Team for the benthic study sedimentation and erosion for new construction of pipeline at Sidi Krir submitted to Sidi Krir electric Company, (2009).
- 50- Principal Investigator of the NIOF Team for the benthic study for West of Delta I Concession in front of the Delta submitted to Burullus Petroleum Company, (2010).
- 51- Principal Investigator of the NIOF Team for the benthic study for West of Delta II Concession in front of the Delta submitted to Burullus Petroleum Company, (2010).
- 52- Principal Investigator of the NIOF Team for the Environmental study for Damietta Concession in front of the Delta submitted to Shell Petroleum Company, (2010).
- 53- Principal Investigator of the NIOF Team for the marine aquaculture proto type submitted to Ministry of Scientific Research, (2009).
- 54- Principal Investigator of the NIOF Cruise Team on Salsabil R/V at Tiran Strait in the front of Sharm El-Sheikh to detect biodiversity of Sharks accumulation by using Acoustic Sounds submitted to Southern Sinai Governor, (2011).
- 55- Principal Investigator of the NIOF Cruise Team to detect the extension of the live corals and detecting the suitable places for putting the net protection against Shark attacks by using Acoustic Sounds in front of Sharm El-Sheikh submitted to Southern Sinai Governor, (2011).
- 56- Principal Investigator for the sustainable development of Bardawil Lake, North Sinai (2013).

- 57- Principal Investigator for the Bathymetric and Seabed characteristics Evaluation at Dabba location for Nuclear Power Plants Authority, (2014).
- 58- Principal Investigator for the Reef Serve: Red Sea Coral Reef Biodiversity, for Science technology and Foundation (2014-2016).
- 59- Participate in the project of "Atoll gas field studies" for studying the site survey for the atoll gas platform (2017).
- 60- Principal Investigator for the Marine Environmental baseline studies for the construction of Dabba power plant for Nuclear Power Plants Authority, (2015-2019).
- 61- Principal Investigator for the Marine geophysical studies for the construction of Dabba power plant for Nuclear Power Plants Authority, (2016-2019).
- 62- Member in the international project "CA15103- Uncovering the Mediterranean Salt gaint (MEDSALT)" under the EU program Horizon 2020. (2016 – 2020).
- 63- Principal Investigator for the project "The detection of sunken monuments in the eastern port of Alexandria". Egyptian German Cooperation Program. (2018-2020).
- 64- Principal Investigator for the project of Explore and locate wrecked ancient Roman ship, Qusayr, the Red Sea (2020-2022).

## **7- EDITORIAL BOARD IN INTERNATIONAL SCIENTIFIC JOURNALS**

- 1- Journal of Earth Science Research. (Canadian Center of Science and Education)  
[www.ccsenet.org/journal/index.php/esr/about/editorial](http://www.ccsenet.org/journal/index.php/esr/about/editorial)
- 2- Marine and Environment (Universe Scientific Publishing) <http://ojs.usp-pl.com/index.php/ME/about/editorialTeam>
- 3- Environmental Earth Sciences journal <https://link.springer.com/journal/12665>  
[Environmental Earth Sciences \(ENGE\) <em@editorialmanager.com>](mailto:em@editorialmanager.com)
- 4- Journal of Environmental Protection- JEP ([jep@scirp.org](mailto:jep@scirp.org))
- 5- Journal of Geoscience and Environmental Protection (GEP).  
<https://www.scirp.org/journal/gep/>
- 6- Arab Institute of Navigation.

7- Earth Science Research (ESR) is an international.

<http://www.ccsenet.org/journal/index.php/esr>

## **8- PUBLISHED BOOKS**

- 1- Nassar M. A., Hamouda A. Z. and Soliman K. S., (2017): Book title: “Marine Geophysical Applications for Detecting Seabed Features: Basics, Acquisition, Processing and Interpretation”, LAP LAMBERT Academic Publishing. ISBN-13: 978-3-330-05984-9.
- 2- Hamouda A., and El-Gharabawy S. (2018): Acoustic Fingerprint and Pollution assessment of Nile Delta Sediments. LAP LAMBERT Academic Publishing. ISBN: 978-613-9-97594-5.

## **9- LIST OF PUBLICATIONS**

- 1- El-Awady, M., Atwia, M. and Hamouda, A. Z., (1996): Intensive Geoelectric exploration and aquifer parameters estimation in Wadi El-Natron, Western Desert, Egypt. Faculty of Science magazine, Alex. Univ., vol. 1, 34-57.
- 2- El-Gendy, A., El-Awady, M. and Hamouda, A. Z., (1996): Electric well log for computing the parameters for the water bearing formation in Wadi El-Natron, Western Desert, Egypt. Faculty of Science magazine, Qena University, Vol., 36, No. 2, 325-336.
- 3- El-Awady, M., El-Nikhely, A. H. and Hamouda, A. Z., (1997): Chemistry of groundwater in Wad El-Natron Area, Western Desert, Egypt. The Third Conference on Geochemistry, Vol., 3, 57-67
- 4- Awad, M. B., El-Gendy, A. and Hamouda, A. Z., (2001): Gravity and Deep Seismic data. Second International Symposium on Geophysics, 13-26.
- 5- Awad, M. B., El-Gendy, A. and Hamouda, A. Z., (2001): The Aqaba 95 Earthquake Seismological observation and its tectonic Significance. Second International Symposium on Geophysics, 81-89.

- 6- Awad, M. B., El-Gendy, A. and Hamouda, A. Z., (2001): Determination of Earthquake Energy Release of the Gulf of Aqaba. Second International Symposium on Geophysics, 70-80.
- 7- Hamouda, A. Z. and El-Gendy, A., (2002): Asymmetrical structures in the Gulf of Aqaba. National Institute of Oceanography and Fisheries. Vol. 28, 419-435.
- 8- Hamouda, A. Z., (2002): Tsunami Data Base of the Eastern Mediterranean. National Institute of Oceanography and Fisheries, Vol. 28, 437-452.
- 9- Hamouda, A. Z., (2004): Gulf of Aqaba Salt Tectonics. Egyptian Geological survey, Vol. XXVII, 369-382.
- 10- Hamouda, A. Z., (2005): Seismic Hazard of Dekhila Harbour, Alexandria Region. Egyptian Geological survey, Vol. XXVII, 369-382.
- 11- Hamouda, A. Z., (2006): Some characteristic features of the Eastern Mediterranean Crust. International Journal of Oceans and Oceanography, Vol. 1, No.2, 195-205.
- 12- Hamouda, A. Z., (2006): Seismic Hazard of Eastern Mediterranean. Journal of Acta Geophysics, Vol. 54, no.2., 163-173.
- 13- Hamouda, A. Z., (2006): Numerical Computations of 1303 Tsunamigenic Propagation towards Alexandria, Egyptian Coast. Journal of African Earth Science, vol. 44, 37-44.
- 14- Hamouda, A. Z., (2007): Finding the characteristics of drinking water formation; A case study southern part of Wadi El-Natron depression, Western Desert, Egypt. J. Appl. Geophys., Vol. 6, No. 2, 451-464.
- 15- Hamouda, A. Z., and El-Wahhab, M. A., (2009): Sediment characteristics and water circulation of Big Jemsa Bay, Red Sea, Egypt. Mar. Geophys Res., 30:95-104.
- 16- Hamouda, A. Z., and Abdel-Salam. K. M., (2009): Estuarine Habitat assessment for construction of a submarine transmission line. Surv Geophys, vol. 31:449-463.
- 17- Hamouda, A. Z., (2009): A Reanalysis of the AD 365 Tsunami Impact along the Egyptian Mediterranean Coast. Acta Geophysica, vol. 58; 4, 1-18.
- 18- Hamouda, A. Z., (2009): Recent evaluation of the assessment seismic hazards for Nuweiba, Gulf of Aqaba. Arab J. Geosc., 10.1007/s12517-009-0096-3.

- 19- Hamouda, A. Z., (2010): Worst scenarios of tsunami effects along the Mediterranean coast of Egypt. *Mar. Geophys Res.*, vol. 31:197-214.
- 20- Hamouda, A. Z., and Abdel-Salam. K. M., (2010): Acoustic image survey for the sea floor at the northeastern side of Alexandria city, Mediterranean Sea' Particles in Europe (PiE) Int. conference.
- 21- Hamouda, A. Z., (2011): Assessment of seismic hazards for Hurghada, Red Sea, Egypt. *Nat Hazards*, DOI 10.1007/s11069-011-9767-y.
- 22- Hamouda, A. Z., and El-Wahhab, M. A., (2012): Detection of the bottom facies characteristics at El Zeit Bay, Red Sea, by using a single-beam acoustic sound. *Oceanology Journal*, Volume 52, pp 60-7.
- 23- Hamouda, A. Z. and Awad M., (2012): Mitigation of the impact for new pipelines construction, Western Egyptian Coast, Mediterranean Sea., *Blue Biotechnology Journal*, pp. 203-220.
- 24- Abd El Wahab M. and Hamouda A. (2012): Effect of desalination plants on the marine environment along the Red Sea, Egypt (Case study). *Thalassas*, 28(2):27-36.
- 25- El-Gammal, M.I., Shata, M.A., Hamouda, A.Z. and El-Gharabawy, S.M. (2014): Assessment of heavy metals concentration in Mediterranean surficial sediments in front of Damietta promontory-Egypt. *Journal of Environmental Sciences*, Volume 42, No. 3, pp. 417-432.
- 26- Hamouda, A. Z., (2014): The seabed characteristics of the bottom floor of Damietta Branch, Egypt, using acoustic signals, *Environ Earth Sci*, DOI 10.1007/s12665-013-2909-7.
- 27- Hamouda, A.Z., El-Gharabawy, M. Awad, M Shata and A. Badawi (2014): Sea bed characteristics in front of Damietta Promontory Nile Delta- Egypt, *The Egyptian Journal of Aquatic Research*, vol., 40, 373-383 pp.
- 28- Hamouda, A.Z. (2014): Marine geophysical exploration for detection of offshore platforms effects on soft bottom characteristics: A case study in a Mediterranean gas field. *East Med Symposium*, Limassol, Cyprus.



- 29- Hamouda, A.Z. , Elsaharety, A., AbouMahmoud, M., (2015) Comparative study between seabed characteristics of the Western and Eastern Harbor, Alexandria Egypt, Journal of King Abdulaziz University : Marine Sciences,
- 30- Hamouda A., EL-Gendy N., El-Gharabawy S., and Salah M., (2015); Acoustic Survey along Heraklion and East Canopus Ancient Greek Cities, Abu Qir Bay, Alexandria, Egypt, Earth Science & Climatic Change, Vol. 6, Issue 7, 1000289, ISSN:2157-7617 JESCC.
- 31- Hamouda A., Soliman Kh., El-Gharabawy S and Nassar M. (2015) Applications of marine geophysical techniques in detecting the seabed characteristics of Alexandria Eastern Coast from Stanley to Sidi-Bishr. Journal of Egyptian Applied Geophysic. ISSN 1687-1251. Vol. 14, 255-266.
- 32- Mohamadin M.I., Hamouda A., Mansour S., (2016): Application of electrical resistivity method for groundwater exploration at the Moghra area, Western Desert, Egypt. The Egyptian Journal of Aquatic Research.Vol.42(3),pp.261-268.  
<http://dx.doi.org/10.1016/j.ejar.2016.06.002>.
- 33- El-Gharabawy, S.M. and Hamouda, A.Z., (2016): Seafloor characterization and backscatter variability of coral Reef by using Acoustic survey; Case study El-Gouna Area, Red Sea. Geophysical Research Abstracts Vol. 18, EGU2016-PREVIEW, 2016. EGU General Assembly 2016.
- 34- Hamouda A., El-Gendy N., El-Gharabawy S. and Fekry A. (2016) Geological implications of acoustic imagery of the recent seabed textures in the Eastern Harbor, Alexandria. The Egyptian Journal of Aquatic Research.  
<http://dx.doi.org/10.1016/j.ejar.2016.06.002>.
- 35- Hamouda, A.Z., and El-Gharabawy, S.M. (2016): Impact of Neotectonic activities on coral reef Red Sea Egypt; Case study Jubal Island. International conference on the marine environment of the Red Sea. KAUST, KSA.
- 36- Hamouda, A.Z. (2016): Salt tectonic features offshore, Nile Delta, Egypt. COST-ANR MEDSALT Symposium, University of Palermo, Italy.

- 37- Hamouda, A.Z., El-Gharabawy, S.M., and Fekry A. (2016): The Emerging Situation of Submerged Ancient Sites at the Eastern Harbor. The Alexandria international conference on Maritime and under water Archaeology. <https://www.bibalex.org/underwaterconf/en/home/staticpage.aspx?page=1018>
- 38- Mohamaden M.I.I., El-Sayed H. M., Hamouda A. Z. (2016): "Combined application of electrical resistivity and GIS for subsurface mapping and groundwater exploration at El-Themed, Southeast Sinai, Egypt." Egyptian Journal of Aquatic Research, Vol. 42(4), PP. 417- 426.
- 39- El-Gharabawy S., Hamouda A. and El-Wahab M. (2017): Seafloor Characterization and Backscatter Variability of Coral Reef by Different Acoustic Techniques, El-Gouna, Red Sea, Egypt. Journal of Oceanography and Marine Research, Vo. 5 (3), DOI: 10.4172/2572-3103.1000168.
- 40- Hamouda A. and El-Gharabawy S. (2019): Impacts of Neotectonics and Salt Diaper on the Nile Fan Deposit, Eastern Mediterranean. Environmental and Earth Sciences Research Journal. Vol. 6, No. 1, March, 2019, pp. 8-18. <https://doi.org/10.18280/eesrj.060102>.
- 41- Hamouda A. Z., El-Gharabawy S. (2019): Evaluation of the Crustal Features of the Gulf of Aqaba Deduced from Geophysical Data. Journal of Geoscience and Environment Protection. Vol. 7, 26-41. <https://doi.org/10.4236/gep.2019.74003>.
- 42- Hamouda A., Soliman Kh., El-Gharabawy S., Nassar M. (2019): Comparative study between acoustic signals and images for detecting seabed features. Egyptian Journal of Aquatic Research. Vol. 45(2), pp. 145-151.
- 43- Hamouda A. and El-Gharabawy S. (2019): Distinct acoustic survey as signatures of gas and oil seepage impacts on the coral reefs of Jubal area, Red sea. Egyptian Journal of Aquatic Research. Vol. 45(3), pp. 219-224.
- 44- Hamouda A., El-Gharabawy S., Fekry A., Nassar M., Salah, M. (2021): Subsidence model of the ancient Royal port of Alexandria linked to sea level rise and natural hazards using integrated geophysical methods. Egyptian Journal of Aquatic Research. Vol. 47 (3), pp. 283-292. <https://doi.org/10.1016/j.ejar.2021.07.003>

- 45- Hamouda, A.; El-Gendy, N.; El-Shishtawy, A.; El-Gharabawy, S.; Fekry, A. (2021): Submergence of the Western Greco-Roman Archaeological Site at the Eastern Harbor of Alexandria: Emerged from High Resolution Geophysical Mapping. Quaternary 2021, 4, 22. <https://doi.org/10.3390/quat4030022>
- 46- Hamouda A., Nassar M., El-Gharabawy S. (2021): Distinguish seabed objects utilizing different marine acoustic techniques. Egyptian Journal of Petroleum. Vol. 30 (3), pp. 45-51. <https://doi.org/10.1016/j.ejpe.2021.07.002>
- 47- Hamouda A., Gobashy, M., Soliman, Kh., Nassar M., El-Gharabawy S. (2021): Evaluation of the seafloor structural setting of Alamein New City offshore area, Egypt. Egyptian Journal of Petroleum. Vol. 30 (3), pp. 53-60. <https://doi.org/10.1016/j.ejpe.2021.07.003>
- 48- Hamouda A., El-Gharabawy S., Fekry A., Nassar M., Salah, M. (2021): Subsidence model of the ancient Royal port of Alexandria linked to sea level rise and natural hazards using integrated geophysical methods. Egyptian Journal of Aquatic Research. Vol. 47 (3), pp. 283-292.
- 49- Hamouda, A.; El-Gendy, N.; El-Shishtawy, A.; El-Gharabawy, S.; Fekry, A. (2021): Submergence of the Western Greco-Roman Archaeological Site at the Eastern Harbor of Alexandria: Emerged from High Resolution Geophysical Mapping. Quaternary 2021, 4, 22.
- 50- Hamouda, A., El-Gharabawy, S., Fekry, A. (2023): Sonar investigation of the old Nubian Villages in the bottom topography of Nasser Lake, Egypt. The Egyptian Journal of Remote Sensing and Space Sciences. Vol. 26, pp. 207 – 215.
- 51- Hamouda, A., El-Gendy, N., El-Gharabawy, S., Salah, M., Barakat, M. (2023): Marine geophysical surveys and interpretations on the ancient Eunostos harbor Area, Mediterranean Coast, Egypt. Egyptian Journal of Petroleum. Vol. 32 (1), pp. 47-55.
- 52- Hamouda, A., Fekry, A., El-Gharabawy, S. (2024): Acoustic-based classification of marine geophysical data for benthic habitat mapping in the littoral zone of Qaitbay Citadel of Alexandria. Egyptian Journal of Aquatic Research, Vol. 50, pp. 8 - 16.

- 53- Hamouda, A., El-Gharabawy, S., Fekry, A., Nassar, M. (2024): Exploration and identification of ancient Roman shipwreck located at Quseir, Red Sea. *Egyptian Journal of Aquatic Research*, Vol.50, pp.17 - 22.
- 54- Hamouda, A., Hassan, M., El-Gharabawy, S. (2024): Enhancing tsunami resilience and evacuation Strategies: A case study of coastal disaster preparedness and heritage protection of the Bibliotheca Alexandrina area. *Egyptian Journal of Aquatic Research*, Vol. 50, pp. 366 – 375.
- 55- Hamouda, A., Maiyza, H., El-Gharabawy, S. (2024): Evaluation of Different Breakwater Designs for a New Harbor at Al-Max, Egypt. *Egyptian Journal of Aquatic Research*, Vol. 50, pp. 357 – 365.
- 56- Hamouda, A., El-Gendy, N., Barakat, M., Hassan, M., El-Gharabawy, S. (2024): Marine Geophysical Evaluation of Seabed and Sub-Bottom Features Offshore Alexandria City Using Advanced Sonar Techniques. *Egyptian Journal of Aquatic Research*, Vol. 33, pp. 485 – 492.
- 57- El Zokm, G., El-Said, G., El-Gharabawy, S., Okbah, M., Hamouda, A. (2025): Worst case scenario for chronic mixed ecotoxicity, assessment of ecological and human health risks from contaminants in an important economic harbor connected to the Mediterranean Sea, Egypt. *Science of The Total Environment*, Vol. 970, 178975
- 58- Xueling You<sup>1,2</sup>, Yuntao Wang<sup>2</sup>, Sana Ben Ismail<sup>3</sup>, Sheng Lin<sup>2</sup>, Zakaria A Khamis<sup>4</sup>, Amr Z Hamouda<sup>5</sup>, Suzan El-Gharabawy<sup>5</sup>, Ruifeng Zhang<sup>1</sup> and Fei Chai (2025): Global eddy-induced variation in the intensities of tropical cyclones. *Environ. Res. Commun.* 7 (2025) 035028.
- 59- Daskalaki, E., Aguirre Ayerbe, I., Baptista, M. A., Amato, A., Cambaz, M. D., Charalampakis, M., Cugliari, L., El-Gharabawy, S. M., Hamouda, A., Hebert, H., Kalligeris, N., Cantavella Nadal, J. V., Meral Özel, N., Péroche, M., and Yalciner, A. C. (2025): Recent Developments in Tsunami Preparedness in the Northeast Atlantic and Mediterranean Region: Challenges, Strengths, and Weaknesses, EGU General Assembly 2025, Vienna, Austria, 27 Apr–2 May 2025, EGU25-16032, <https://doi.org/10.5194/egusphere-egu25-16032>, 2025.