Curriculum Vitae

PERSONAL DATA

Name:	**Maroof A. Khalaf**
Date of birth:	**03–03–1956**
Civil status:	**Married**
Nationality:	**Jordanian**

CONTACT ADDRESS

Prof. Dr. Maroof A. Khalaf

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UNIVERSITY DEGREES

Qualifications:
B.Sc. (in Zoology) Poona University, India, 1982.
M.Sc. (in Zoology, Fishery science) Marathwada University, India, 1985.
Ph.D. (in Zoology, Fishery science) Marathwada University, India, 1990
Current Status
Head of the Department of Marine Biology
Associated Professor at Department of Marine Biology-Faculty of Marine Sciences, University of Jordan/Aqaba

PROFESSIONAL POSITIONS AND WORKING EXPERIENCE:

1992- Assistant Researchers at the Marine Science Station, University of Jordan-Yarmouk University.
1998-2000 Curator of the Marine Science Station Aquarium

1992-2006 Assistant researcher
2006- Associated researcher
2014- Full Professor
2004 -2007 Director of the Marine Science Station, Aqaba-Jordan (University of Jordan and Yarmouk University) & Associated Researcher.
2008- Sabbatical leave in Al-albayt University
2009- 2012 Associated Professor at the Department of Marine Biology, Faculty of Marine Sciences, University of Jordan/Aqaba
2013-2015- Head of the Department of Marine Biology**,** Faculty of Marine Sciences, University of Jordan/Aqaba.
2016- Dean of the Faculty of Marine Sciences, University of Jordan/Aqaba.

COURSES TAUGHT

- General Biology 102 (English)
- General Biology lab 101 and 102 (English)
- Fish Biology (English)
- Marine Biology (English)
- Marine Living Resources (English)
- Marine Vertebrates (English)
- Principals of Environment (Arabic)
- Fish Biology and Ecology for master students
- Vertebrate Anatomy

ACACADEMIC AND ADMINISTRATIVE EXPERIENCE

- Head of marine biology department 2013-2014
- Director of the Marine Science Station August 2003-August 2008
- Participate in Marine Biology department meetings and activities
- Participate in all Council meeting of Marine Science College
- Participate in preparing the Undergraduate Marine Science Program
- Participate in preparing the master Marine Science Program

CURRENT RESEARCH INTERESTS

Research interests include topics in Fish Biology and Ecology, Fisheries and stock Assessment, Fish Taxonomy, Ornamental Fish, Marine Biodiversity and Monitoring Programmes. I conducted, participated and lead research, monitoring programmes, and

surveys in the Jordanian part of the Gulf of Aqaba-Red Sea. I produced and published many scientific papers, produced many scientific and consultancy reports on ornamental fish trade, socioeconomic aspects for fishermen in Aqaba, fish stock assessment, and environmental pollution and environmental management.

Current research interests are in the fields of:

- The Establishment Of Baseline and Development of Management Plan For Fisheries in Aqaba.
- Fish distribution and fish biology of deep sea fishes.
- Fish assemblages and fish monitoring of the coral reef.
- Seagrass benthic habitat.
- Marine Biodiversity.
- Environment of the Gulf of Aqaba and the Red Sea.

FUNDED RESEARCH PROJECTS

Financial supports for projects have been applied to different national and international institutions including:

Research Projects and Monitoring Programs:

I. Projects:

Principal investigator in the following Research Projects and studies:

A survey of fishes along the Jordanian coast: Their distribution and habitats (1994-1999). Supported by Deanship of Academic Research, The University of Jordan, Amman (7000 JD).

Investigation on fish population and diversity in Al-Mamlah area within the proposed Marine Peace park. Started in 1997 and ended in 1999. Supported by National oceanic and Atmospheric Administration and funded by the USAID 20000 JD.

Jordan country study on biological diversity. Prepared by the general Corporation for the Environment Protection (GCEP), with technical support from the United Nations Environment Progamme (UNEP) and funding from the Global Environment Facility (GEF).

National Monitoring Program of the Jordanian Coast of the Gulf of Aqaba (2002-Now), budget 60.000 JD/year (Continuous Program).

Monitoring programme on Fish and fish assemblages in coastal waters off the Industrial complex. Started in 1994 till now. (30,000 JD)

(2003-2004) Stock assessment of commercial fishing along the Jordanian Gulf of Aqaba, with emphasis on biology of two species: *Pomadasys stridens* (Haemulidae) and *Lethrinus variegates* (Lethrinidae). Supported by Deanship of Academic Research, The University of Jordan, Amman (7500 JD).

Higher Council for Science and Technology, Jordan: Environmental assimilative capacity of coastal habitats and green and mariculture of high revenue low environmental burden spices on the Jordanian sector of the Gulf of Aqaba (2004-2006), budget 100.000 JD.

II. Regional Research Projects:

Conservation and sustainable use of biodiversity of Socotra Archipelago. Marine Habitat, Biodiversity and Fisheries surveys and management. Supported and funded by GEF-UNDP. Year: 1999.

Consultancy on Ornamental fish Trade in the Red Sea and Gulf of Aden. Presented to the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden.

The Establishment Of Baseline and Development of Management Plan For Fisheries in Aqaba**.** Funded by Deanship of Academic Research, The University of Jordan, Amman (10, 000 JD)**.**

III. International Projects:

Principal investigator in following international research and monitoring programs:

The "Red Sea Program" (1997-2000). An international research and monitoring program of the Red Sea Red Sea Program.

USAID-MER "Red Sea Marine Peace Park" (RSMPP). Research, monitoring and management of the Northern Gulf of Aqaba (1999-2002).

Fish monitoring programm supported by Global Environment Facility, World Bank and Jordan.

USAID-MERC sponsored program: "Preserving the Endangered Marine Ecosystems in the Northern Gulf of Aqaba" (2003-2006).

USAID-MERC sponsored program: "Artificial reefs for environmental management in the Gulf of Aqaba" (2006-2009).

Preserving the endangered marine ecosystem in the northern Gulf of Aqaba: Development of resource management oriented research and novel monitoring. **"fast-track"** project, supported by the US Agency for International (2004-2007).

Project Number (NATO): SFP. 982161. Monitoring natural and Anthropogenic aerosol pollution and its impact on ecosystem in the Gulf of Aqaba.

Developing Marine Aquarium and Establishing of Marine Museum at the Marine Science Station/Aqaba/Jordan. Funded by Global Environmental Facility (GEF), (2005-2008), budget 50.000 US$.

Establishment of a Middle Eastern Biodiversity Research, Training and Conservation Network. Funded by the DAAD-Germany (2006-2008), budget 300.000 Euro /year.

Sea-Dead Sea water conveyance EIA study. Funded by World Bank

2009-2012. Production of Rabitfish *Siganus rivulatus* through low impact land based mariculture. MERC.

CONSULTANCIES

1. Environmental quality monitoring program for Ayla Oasis Development Co., June 2012-June 2013, **budget 125.000 JD**
2. Monitoring Program for the Expansion of the Aqaba Container Port Terminal, prepared for BAM International LLC Abu Dhabi and Aqaba Container Terminal (ACT), September 2011-September 2013, **budget 50.000 JD**
3. Red Sea - Dead Sea Water Conveyance Study Program, Additional Studies, Red Sea Study, Best Available Data Report, prepared for the World Bank, March 2009-September 2011, **budget 210.000 US Dollar**.
4. Assessment of benthic habitat for the new phosphate port relocation site, Phosphate Mining Company, March 2010, **budget 12.000 JD**
5. Coastal water characteristics at the Jordanian northernmost part of the Gulf of Aqaba, Red Sea. Case study of the Wahat Ayla investment site, prepared for Wahat Ayla for Development Company, October 2003, budget 10.000 JD.
6. Identifying the long-term Environmental Impacts of the Proposed Red Sea-Dead Sea Conduit (RDC), Prepared for Royal Scientific Society, November 2005, budget 12.000 JD.
7. Coral mapping in the Aqaba special economic zone, south and middle ports area. Prepared for Aqaba Developing Corporation (ADC), June 2007, budget 100.000 JD.
8. Conservation and sustainable use of biodiversity of Socotra Archipelago. Marine Habitat, Biodiversity and Fisheries surveys and management. Supported and funded by GEF-UNDP. Year: 1999.

9. Consultancy on Ornamental fish Trade in the Red Sea and Gulf of Aden. Presented to the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden. Year: 2002.
10. The Of Baseline and Development of Management Plan For Fisheries in Aqaba. Funded by UNDP, 40,000 JD. Year 2014-2015.
11. National consultant, Review of legislation, stratigies, policies and management plan for fisheries sectors in PERSGA countries, The Hashemite Kingdom of Jordan, 2015

INTERNATIONAL CONFERENCES

Conferences:

Khalaf M.A and M.Disi. (1997). Fishes of Aqaba Gulf. The 8th Arabic Conference of Biological Sciences & The 4th Jordanian conference of biological Sciences. Amman.

Khalaf,M., El-zibdeh, M., Kanaan Nemeh and Saida Mir. Food and Feeding Rhythm of six planktivorus fishes from the Gulf of Aqaba-Jordan*(in preparation). Presentation to: international conference of coral reef ecosystem, to be held between Nov. 23-27 2000 in Bali, Indonesia.*

El-Zibdeh,M., M. Khalaf, Kanaan Nemeh and Saida Mir. Aspects of growth and reproductive Biology of Six Planktivorurus Fishes from the Gulf of aqaba-Jordan. *(in preparation). Absract submitted to: international conference of coral reef ecosystem, to be held between Nov. 23-27 2000 in Bali, Indonesia.*

Khalaf, M.A.2002. Migrant, exotic and endemic fish species of the Jordanian Gulf of Aqaba. Lebanon.

Khalaf, M.A&A. Abdalla. 2005. Status of the ornamental fish trade in the Red Sea and Gulf of Aden. The 7th Indo-Pacific fish conference. Taipei, Taiwan.

Bio Vision Alexandria 2010. New Life Science: Future Prospects 11-15/4/2010, Alexandria.

Red Sea Biodiversity, Jeddah, April 2011

Regional Workshop on Marine Biodiversity, Muscat, Oman, November 2011.

The 2nd Regional meeting on the status of Elasmobranchs in the Red Sea and Gulf of Aden, PERSGA, Jeddah, Saudi Arabia 23-24 April 2012.

Local, National and Regional Biodiversity Assessment Project Arabian Peninsula Regional Technical Workshop 12-14/11/2013, Abu-Dabi, UAE.

TRAINING COURSES

Co-Chair: Establishment off Middle Eastern Biodiversity Research, Training and Conservation Network. Training Workshop on Collection Management and Natural History Museum Curatorship. Frankfurt and Wilhelmshaven , Germany, 3-17 September 2006.

Co-Chair: Biodiversity Course: Establishment of a Middle Eastern Biodiversity Research, Training and Conservation Network", Organized by the Marine Science Station and Senckenberg Research Centre and Museum, 10-21 June 2007, Amman-Aqaba, Jordan.

Co-Chair: Red Sea Program (RSP). Identification course on marine organisms. June 11-22nd. Course coordinators: Maroof A. Khalaf & Salim Al-Moghrabi

WORKSHOPS

Co-Chair: Middle Eastern Regional Science Symposium and Workshop: Butterflyfish (family: Chaetodontidae) Research and Monitoring, Aqaba, Jordan, June 19-20, 2002.

PUPLICATIONS

2016

Al-Najjar, T; Al-Momani, R; Khalaf, M; Wahsha, M; Sbaihat, M; Khalaf, N; Abu Khadra, K and Magames, H (2016) Levels of Heavy Metals in Fishes (*Cheilinus trilobatus)* from the Gulf of Aqaba, Jordan, Natural Science, 2016, 8, 256-263. http://www.scirp.org/journal/ns, http://dx.doi.org/10.4236/ns.2016.86030 .

AL-Najjar, T., Maroof A. Khalaf, Mohamad Wahsha, Khalid Abu Khadra, Rashad Ahmad Gassaymah (2016) Levels of Heavy Metals in Mesopelagic Fish Species (*Polysteganus coeruleopunctatus*, *Argyrops spinifer* and *Argyrops filamentosus*) of the family Sparidae from the Northern Gulf of Aqaba, Red Sea. Fresenius Environment Bulletin, 25(12), 5253-5260.

2015

Al-Najjar, T., Khalid Abu Khadra, Omar Yousef, Rawashdeh, Maroof khalaf, Mohammad Wahsha (2015). Levels of Trace Metals in (*Euthynnus affinis*) Fish from the Gulf of Aqaba, Jordan. Fresenius Environment Bulletin, 24 – No 9a. 2995-3000.

2014

Khalaf, M.A and Abdallah, M. (2014) Spatial distribution of fifty ornamental fish species on coral reefs in the Red Sea and Gulf of Aden. Zoo Keys. 367: 33-64.

2013

Al-Horani, F.A and **Khalaf, M.A.** (2013) Developing Artificial Reefs for the mitigation of Man-Made Coral Reef Damages in the Gulf of Aqaba-Red Sea: coral recruitments after 3.5 years of development. Marine Biology Research Vol. 9/8: 749-757.

Khalaf, M.A., Alawi, M., Al-Zgool, A. and Al-Najjar, T. (2013) Levels of Trace Metals in the Bigeye hound Deep Sea Shark *Iago omanensis* from the Gulf of Aqaba, Red Sea. Vol 22/12.

Khalaf, M. A., **Al-Rousan, S.,** & Al-Horani, F. A. (2012). Fish assemblages in seagrass habitat along the Jordanian coast of the Gulf of Aqaba. Natural Science, 4(8), 517-525.

2011

Al-Horani, F., Hamdi, M., **Al-Rousan, S.** (2011) Study of *Drupella cornus* prey selection and grazing rates on corals from the Jordanian coast of the Gulf of Aqaba-Red Sea. ***Jordan Journal of Biological Sciences*** 4 (4): 191-198.

2012

Khalaf, M.A; Al-Najjar, T; Alawi, M and Disi, A.A (2012) Levels of trace metals in three fish species *Decapterus macrellus*, *Decapterus macrosoms* and *Decapterus russelli* of the family carangidae from the Gulf of Aqaba, Red Sea, Jordan. *Natural Science* 4/6: 362-367.

Khalaf, M.A; Al-Rousan, S and Al-Horani, F.A. (2012) Fish assemblages in seagrass habitat along the Jordanian coast of the Gulf of Aqaba. *Natural Science.* 4/8:517-527.

Khalaf, M.A, Al-Rousan, Suad A. Al-Horani. Accepted .2012. Fish assemblages in seagrass habitat along the Jordanian coast of the Gulf of Aqaba. *Natural Science.* 4/8.

Khalaf, M.A, Al-Najjar, T, Alawi, M and Disi, A.A. 2012. Levels of trace metals in three fish species *Decapterus macrellus*, *Decapterus macrosoms* and *Decapterus russelli* of the family carangidae from the Gulf of Aqaba, Red Sea, Jordan. *Natural Science* 4/6: 362-367.

Huebner LK; Dailey B; Titus BM; **Khalaf M**; Chadwick NE (2012) Host preference and habitat segregation among Red Sea anemonefish: Effects of seaanemone traits and fish life stage. Marine Ecology Progress Series, 464: 1-15.

2011

Al-Rousan, S; Al-Horani, F; Eid, E; and **Khalaf, M**. 2011. Assessment of seagrass communities along the Jordanian coast of the Gulf of Aqaba, Red Sea, *Marine Biology Research,* 7: 93_99.

Al-Rousan, S; Al-Horani, F; Eid, E; and **Khalaf, M**. (2011) Assessment of seagrass communities along the Jordanian coast of the Gulf of Aqaba, Red Sea, *Marine Biology Research,* 7: 93_99.

Al-Rousan, S; Al-Horani, F; Eid, E; and **Khalaf, M**. (2011) Assessment of seagrass communities along the Jordanian coast of the Gulf of Aqaba, Red Sea, *Marine Biology Research,* 7: 93_99.

2009

Krupp, F; Zanjonz, U and **Khalaf, M.** 2009. A new species of the deepwater cardinalfish genus Epigonus (Perciformes: Epigonidae) from the Gulf of Aqaba, Red Sea. *Aqua* 15:4-15.

Krupp, F; M. Al-Jumaily, M. Braiche; **M. Khalaf**, M.Malek and Streit, B. 2009. The Middle Eastern Biodiversity Network generating and sharing knowledge for ecosystem management and conservation. *ZooKeys* 31:3-15.

2008

Khalaf, M.A and F. Krupp. 2008. A new species of *Symphysanodon* (Perciformes: Symphysanodontidae) from the Gulf of Aqaba, Red Sea. *Aqua* 4:2-14.

2007

Khalaf, M.A, and Zajonz, U (2007). Fourteen additional fish species recorded from below 150 m depth in the Gulf of Aqaba, including *Liopropoma lunulatum* (Pisces: Serranidae), new record from the Red Sea. *Fauna of Arabia* 23:421-433.

2006

Khalaf, M.A, Al-Horani, F.A, Manasrah, R, Al-Rousan, SA. (2006). Community structure of the family Pomacentridae along the Jordanian coast, Gulf of Aqaba, Red Sea. *Zoology in the Middle East* 37: 47-62.

Zl-Zibdeh, M, **Khalaf, M**, Odat, N (2006). The fishery status in Jordan`s Gulf of Aqaba, Red Sea. *Dirasat, Pure Science* 33/1:127-142.

Al-Horani, F. A., Al-Rousan, S. A., Al-Zibdeh, M., **Khalaf, M. A.** (2006). The status of coral reefs on the Jordanian coast of the Gulf of Aqaba, Red Sea. ***Zoology in the Middle East*** 38: 99-110.

Manasrah, R. S., Al-Horani, F. A., Rasheed, M. Y., Al-Rousan, S. A., **Khalaf, M. A.** (2006) Patterns of summer vertical and horizontal currents in coastal waters of the northern Gulf of Aqaba**,** Red Sea. *Estuarine, Coastal and Shelf Science* 69: 567-579.

2005

Khalaf, M.A. (2005). Five additional records of fishes from the Gulf of Aqaba, including *Mola mola* (Forsskäl, 1775), new for the Red Sea, *Zoology in the Middle East*, 34:45-42.

Al-Zibdah,M, **Khalaf MA.**, N. Kanaan & S. Mer (2005). Fish inventory, Growth, Reproduction and feeding habit of the holocentrid fish, *Sargocentron diadema* (Lacepéde, 1802) from the Gulf of Aqaba, *Abhath Al_Yarmouk*, 14/1:93-109 .

Khalaf, MA & M. Crosby (2005). Overview, Middle East regional Science Symposium and workshop: Butterflyfish (Family Chaetodontidae) research and monitoring. *Aquatic conservation*, S4-S11.

Khalaf M.A. & M. Abdalla (2005). Community structure of butterflyfish in the Red Sea and Gulf of Aden. *Aquatic conservation*, S77-S89.

Khalaf M.A and M. Crosby (2005) Assemblage structure of butterflyfish and their use as indicators of Gulf of Aqaba benthic habitat in Jordan. *Aquatic conservation*, S27-SS43.

Al-Rousan, S; Rasheed, **M; Khalaf**, M.A & M. Badran (2005). Bottom habitat and biological characteristics of the Jordanian northern Gulf of Aqaba. *Chemistry & Ecology* 21/4:227-239.

El-Labadi, S.; Ismael, N.M, and **Khalaf, M.A** (2005). Intestinal digenetic trematodes of Lethrinus fish species from the Gulf of Aqaba, Red Sea. *J.J.Appl.Sci*., 17/1:71-76.

El-Labadi, S.; Ismael, N.M, and **Khalaf, M.A** (2005) Intestinal digenetic trematodes of some fishes from the Gulf Of Aqaba. *Pakistan Journal of Zoology*. 37/3:

Khalaf, M.A, Al-Horani, F.A, Manasrah, R, Al-Rousan, SA. (2005). Community structure of the family Labridae along the Jordanian coast, Gulf of Aqaba, Red Sea. *Lebanese Science Journal*, 6/2.

2004

Zibdeh M, **Khalaf M.A.**, S. Mir, and N. Kannan. 2004. Reproductive biology, growth, diet composition and feeding rhythm in the planktivory cardinalfish *Apogon aureus (Lacepede, 1802)* from Gulf of Aqaba-Jordan. *Abhath Al-Yarmouk* 13/1:112-125.

Khalaf, M.A (2004). Fish fauna along the Jordanian Coast - Gulf of Aqaba. *Journal of Faculty of Marine Science* 15:*23-50.*

2003

Randall J.E and **M.A. Khalaf.** 2003. Redescription of the labrid fish *Oxycheilinus orientalis* (Günther), a senior synonym of *O. rhodochrous* (Günther), and the first record from the Red Sea. *Zoolological Studies* 42 (1):135-139.

Kochzius M, R. Soller, **M.A. Khalaf**, D. Blohm. 2003. Molecular phylogeny and biogeography of lionfishes (Scorpaenidae, Pteroinae) based on mitochondrial DNA sequences. *Mol Phyl Evol* 28:396-403.

Khalaf, M.A and F. Krupp. 2003. Two new records of fishes from the Red Sea. *Zoology in the Middle East* 30: 55-59.

2002

Khalaf M.A and M. Kochzius. 2002. Community structure and biogeography of shore fishes in the Gulf of Aqaba, Red Sea. *Helgol Mar Res* 55:252-284.

Khalaf M.A, and M. Kochzius. 2002. Changes in Trophic community structure of the shore fishes at an industrial site in the Gulf of Aqaba, Red Sea. *Mar Ecol Prog Ser* 239:287-299.

1996

Khalaf M.A, A. M. Disi and F. Krupp. 1996. Four new records of fishes from the Red Sea. *Fauna of Saudi Arabia.* 15: 402-406.

SUPERVISE THE FOLLOWING MASTER THESIS

Tawfiq, J.F. (2001) Studies on Taxonomy and Ecology of Some Fish Larvae From The Gulf of Aqaba

Kanan, N.M. (1998) Studies on planktivorous fish ecology in coral reef of the Gulf of the Gulf of Aqaba. Master thesis, p. 119.

Odat, N. (2001) Assessment of fisheries stocks in the Jordan Gulf of Aqaba with emphasis on scombridae. Master thesis, pp. 112.

Motasem Al-Sayed (2008): Levels of trace metals in some Carnivorous fish of Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.

Ahmad, (2010) Studies of assemblages and recruitment of coral reef fish of Pomacentridae (Damselfishes) on both Natural and Artificial reefs in Jordan's Aqaba Gulf. Master thesis Al albayt University.

Maen batayneh (2010): Levels of trace metals in some Herbivorous fish of Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.

Neveen Ahmad (2008): Identification of fish parasites in the intestine of stone fish from the Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.

Ali Al-Zgool (2008): Levels of Trace metals in food chain of some carnivores fishes (Family: Carangidae) collected from the Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.

Rawashdeh Omar (2013): levels of trace metals in Tuna fish from the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan.

Shorouq Salman ma'ayta (2015): assesment of fish stocks for developing management plan of fisheries in aqaba. the university of jordan-aqaba branch.

Tasneem Shandaque (2015): biological studies of some deep sea fishes belonging to the family sparidae (seabreams) collected from the jordanian coast of the gulf of aqaba. the university of jordan-aqaba branch.

Rashad Gassaymah (2015): levels of heavy metals in mesopelagic fish species (*polysteganus coeruleopunctatus, argyrops spinifer*and *argyrops filamentosus*) of the family sparidae from the northern gulf of aqaba, red sea.

Moafaq Al-kushman (2016): toxicity of heavy metals in two fish species *iago omanensis* and *auxis thazard* collected from the northern gulf of aqaba, red sea

LIST OF BOOKS, SCIENTIFIC REPORTS AND MANUALS

- Red Sea - Dead Sea Water Conveyance Study Program, Additional Studies, Red Sea Study, Best Available Data Report, submitted to the World Bank, July 2010.
- Assessment of benthic habitat for the new phosphate port relocation site, Phosphate Mining Company, March 2010.
- Environmental Appraisal of the Jordanian Coast of the Gulf of Aqaba, Red Sea. Jordan's National Monitoring Program. Annual reports 2002-2013.
- Environmental quality of the coastal water, bottom sediments, nekton and benthos in front of the Industrial Complex, prepared for Jordan's Phosphate Mines Company, Aqaba-Jordan. Annual reports 2002-2013.
- **Khalaf, M.A**, Mohammed Abdalla, A, Edwards, A, Hills, J and Le Tissier, M (2007). Current status of ornamental fish trade in the Red Sea and Gulf of Aden with Guidelines for self-finance monitoring, control and surveillance programme and proposal for quotas, PERSGA Technical series No. 14:1-108.
- Coral mapping in the Aqaba special economic zone, south ports area. Prepared for Aqaba Developing Corporation (ADC), June 2007.
- Coral mapping in the Aqaba special economic zone, middle ports area. Prepared for Aqaba Developing Corporation (ADC), June 2007.
- Al-Mughrabi, S and **M. Khalaf.** 1995. Review of Marine Biodiversity in Jordan.pp.131.
- Identifying the long-term Environmental Impacts of the Proposed Red Sea-Dead Sea Conduit (RDC), Prepared for Royal Scientific Society, November 2005.
- Environmental assimilative capacity of coastal habitats and green mariculture of high revenue low environmental burden species on the Jordanian sector of the Gulf of Aqaba Project, 2004-2007.
- Assessment of benthic community structure (fish, coral, seagrass and sediment) at the site of Tala-Bay (Al-Mamlah), Aqaba, Jordan. Prepared for Zara for Development Company, September 2004.
- Zibdeh M, **M.A. Khalaf**, T. AL-Najjar.2003. Cultural and Socio-economic structure of the fishermen community and fishing industry in the Jordan`s Gulf of Aqaba, Red Sea. UNESCO office-Amman.

- Coastal water characteristics at the Jordanian northernmost part of the Gulf of Aqaba, Red Sea. Case study of the Wahat Ayla investment site, prepared for Wahat Ayla for Development Company, October 2003.
- **Khalaf M.A.,** M. Crosby and E.S. Reese.2002. A manual for utilizing butterflyfish as indicators of changing conditions in coral reefs of middle east. Supported by NOAA, MSS and ASEZA.
- Zajonz, U; **M Khalaf** and F Saeed (2000). The inshore fish communities of the Socotra Archipelago: A baseline for monitoring and conservation. Report.
- **Khalaf, M. A** (2000). Fishery Statistical reports of Jordan. Submitted to PERSGA office, Jeddah. (Report).
- **Khalaf, M** and A. Abu Hilal. 1999. Fish and fish assemblages in coastal waters of Al-Mamlah bay within the proposed Reds Sea Marine Peace Park-Aqaba-Jordan. Report.
- Environmental quality of the coastal water, bottom sediments, nekton and benthos in front of the Industrial Complex, prepared for Jordan's Phosphate Mines Company, Aqaba-Jordan. Annual reports 2002, 2003 till now.
- Environmental quality of the coastal water, bottom sediments, nekton and benthos in front of the industrial complex, prepared for the Jordan's Phosphate Mines Company, Aqaba-Jordan.
- Identifying the long-term Environmental Impacts of the Proposed Red Sea-Dead Sea Conduit (RDC); Environmental Impact Assessment for physical and marine biological components. Prepared for Royal Scientific Society, Amman-Jordan.
- Ayla Lagoon Tourism Development; Master Plan Environmental Impact Assessment. Assessment of existing marine environment. Prepared for ECO Consult Company-Wahat Ayla for Development Company. Aqaba-Jordan.
- UNDP (2015). The Establishment Of Baseline and Development of Management Plan For Fisheries in Aqaba.
-
- **OTHER ACTIVITIES**

- **Conference Activities**
    - Co-Chair of the Organizing Committee for the "First International Congress Documenting, Analyzing and Managing Biodiversity in The Middle East" 20-23-October 2008, Aqaba-Jordan.

- Co-Chair of the Organizing Committee for the Biodiversity Course: Establishment of a Middle Eastern Biodiversity Research, Training and Conservation Network" 10-21 June 2007, Amman-Aqaba, Jordan.
- Co-chair of the Organizing Several local Workshop.

- **Journal and Refereeing Activities:**

  Review several manuscripts for the following international journals:
  - Aquatic conservation
  - British Journal of Applied Science & Technology
  - Jordan Journal of Agricultural Sciences (JJAS)
  - Jordan Journal of Biological Sciences (JJBS)

PROFESSIONAL SKILLS

- Identification and classification of marine fishes.
- Visual techniques in fish assemblages and benthic community studies.
- Heavy metal analysis in fish

MISCELLANEOUS

- language: Arabic, English and German.
- Computer skills in Microsoft Windows and Office with all applications and versions, and some statistical programs.

QUALIFIED DIVER

CMAS and Advanced open water diver PADI

Under water Camera photographer

EXPERIENCE DIVES IN THE REGION

Jordan, Egypt, Saudi Arabia, Yemen and Djibouti.

FELLOWSHIPS

October 1997 Senckenberg Museum, fish taxonomy and Scientific cooperation between Marine Science Station and Senckenberg Museum.

October 1998 Senckenberg Museum, fish taxonomy and Scientific cooperation between Marine Science Station and Senckenberg Museum.

August 2000 Senckenberg Museum and Center for Marine Tropical, Bremen, fish taxonomy to the fishes collected from Socotra, Yemen and Scientific cooperation.

June/July Senckenberg Museum, fish taxonomy and Scientific cooperation between Marine Science Station and Senckenberg Museum.

June/July 2003 Senckenberg Museum, Frankfurt, fish taxonomy and Scientific cooperation between Marine Science Station and Senckenberg Museum.

December 2004 Stanford University-USA.

July 2007 Senckenberg Museum, Frankfurt, fish taxonomy and Scientific cooperation between Marine Science Station and Senckenberg Museum.