

Curriculum Vitae



Professor Tariq Hasan Ahmad Al-Najjar

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Personal Data

Date of Birth: May 10, 1965
Place of birth: Irbid
Nationality: Jordanian
Marital status: Married, Family, boy 23 years, boy 14 years and girl 18 years
Languages: Arabic
English

Education:

Year	Degree	University	Major	Minor
1996-2000	PhD	Bremen, Germany	Marine Biology and Ecology	Plankton Ecology
1988-1991	M.Sc.	Yarmouk University	Biology	Marine science

		Jordan		
1984-1988	Bsc	Yarmouk University Jordan	Biology	Environmental Science
1981-1983	General Secondary Education	Jordan- Irbid	Science	-

Working Experience

August 2017-till June 2018: Visiting researcher At University of California, Santa Cruz
 September 2016- August 2017: **Assistant president** of Jordan University Aqaba branch
Director of Marine Science Station
 August 2014-August 2015- **Assistant president** of Jordan University for Academic affair
 - **General Registrar** of the Jordan University/Aqaba

August 2013 –September 2016: **Dean**, Faculty of Marine Sciences,
 Jordan University/ Aqaba Branch

December 2012-August 2013: Professor of Marine Biology and Ecology
Head of Marine biology department,
 Faculty of Marine Sciences
 Jordan University/ Aqaba Branch

2010-2011, 2014-till August 2017
Director of Marine Science Station
 Aqaba-Jordan

2000 till August 2007: Assistant Research, The University of Jordan
 Marine Science Station, Aqaba- Jordan.

August 2007- 2009: Associated Research, The University of Jordan
 Marine Science Station, Aqaba- Jordan.

2009 –December 2012: Associated professor of Marine Biology and Ecology
 Faculty of Marine Sciences
 The Jordan University/ Aqaba Branch

Summer, 2006 visiting researcher, Hamburg University, Germany

Summer, 2005 visiting researcher, Stanford University, USA
 Summer, 2008 Teaching Advance course in phytoplankton Taxonomy,
 Naples-Italy

1992-2000: Research Assistant, the University of Jordan
Marine Science Station, Aqaba-Jordan

1988-1991: Teaching Assistant, Yarmouk University
Irbid-Jordan

المهام المكلف بها

تاريخ النهاية	تاريخ البدايه	مكان العمل	المهمه
2015-09-05	2013-09-01	كلية العلوم الاساسية و البحرية	العميد
2016-08-31	2015-09-06	كلية العلوم الاساسية و البحرية	العميد
2013-09-08	2012-09-09	كلية العلوم الاساسية و البحرية / قسم الاحياء البحرية	رئيس قسم أكاديمي بالنيابة
2017-08-24	2016-09-01	مكتب رئاسة فرع الجامعة الاردنية في العقبة	ق.أ مساعد رئيس فرع الجامعة الاردنية/العقبة
2011-08-15	2010-08-15	المحطة البحرية / العقبة	مدير
2011-09-20	2011-08-15	المحطة البحرية / العقبة	مدير
2016-08-31	2015-09-23	المحطة البحرية / العقبة	مدير
	2020-09-21	مكتب رئاسة فرع الجامعة الاردنية في العقبة	مساعد رئيس فرع الجامعة الاردنية للشؤون الاكاديميه/العقبة

Teaching experience:

- 1- General Biology 101 : Faculty of Basic and Marine Sciences
Jordan University/ Aqaba Branch
- 2- General Biology 102 Faculty of Basic and Marine Sciences
Jordan University/ Aqaba Branch
- 3- Red Sea Environment Faculty of Basic and Marine Sciences
Jordan University/ Aqaba Branch
- 4- Marine Invertebrates (MB 251): Jordan University/ Aqaba Branch
- 5- Marine Sciences (MB): Jordan University/ Aqaba Branch
- 6- Zoology (): Jordan University/ Aqaba Branch
- 7- Phytoplankton, Seagrass and Algae : Jordan University/ Aqaba Branch
- 8- Plankton : Jordan University/ Aqaba Branch
- 9- Seagrass and Algae: : Jordan University/ Aqaba Branch
- 10- Environmental sciences: Jordan University/ Aqaba Branch
- 11- Environmental pollution: Jordan University/ Aqaba Branch
- 12- Zooplankton : Jordan University/ Aqaba Branch
- 13- Marine Pollution: Jordan University/ Aqaba Branch
- 14- Biological Oceanography: Jordan University/ Aqaba Branch
- 15- Animal physiology lab: Yarmouk University
- 16- Comparative vertebrate anatomy lab B 213: Yarmouk University
- 17- Advance plant physiology lab B 529: Yarmouk University

PhD supervising:

- 1- Astrid Corniles (2005): Seasonal dynamics of the Copepod Population in an Oligotrophic Environment - the Northern Gulf of Aqaba (Red Sea). Ph.D thesis, Bremerhaven, Germany.
- 2- Fatih Sahin (2010): Seasonal dynamics of phytoplankton in the Gulf of Aqaba. Ph.D thesis, Synops, Turkey.
- 3- Daniel Killam (2016-2018): paleontological study investigating the past and present health of the giant clams (*Tridacna*) in the Gulf of Aqaba. California University Santa cruise, USA.

Master student supervising (31 student):

- 1- Abd El-Wahab Al-Shiyab (2004): Heterotrophic nutrition of Giant clam (Tridacnidae) from the Jordanian coast of the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan
- 2- Jamal bany Fawwaz (2005): plankton as possible Bioindicator for trace metals pollution in the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan
- 3- Yousef, Mohammad Abu-Karma (2006): Algae and seagrass as Bioindicators for trace metals pollution along the Jordanian coast of the Gulf of Aqaba. Master thesis, Yarmouk University, Irbid Jordan
- 4- Tawaha Mohamad (2006): Sea Urchin *Diadema setosum* as possible bioindicator for trace metal pollution in the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan.
- 5- Jessica Luo, M.S. (2007): Dominance of seasonal fluctuations over local variability on zooplankton in the Gulf of Aqaba. Master thesis, Stanford University, Stanford, USA. pp 97.
- 6- Ibrahim Abd Al-Hadi Saleh (2007): Age, Growth and Shell Morphometrics of the Gastropod *Thais savignyi* (Mollusca: Neogastropoda: Muricidae) from the Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka, Jordan.
- 7- Raid Jawasreh (2008): zooplankton and chlorophyll *a* relation to other environmental pollution parameters in King Talal Dam and Gulf of Aqaba, Jordan. Master thesis, Yarmouk University, Irbid Jordan.
- 8- Khatameen Ahmad (2008): Seasonal variations of gastropods species from the Intertidal zone along the Jordanian coast of the Gulf of Aqaba. Master thesis, Yarmouk University, Irbid Jordan.
- 9- Hosam Al-Omarey (2008): Determination of Natural and Anthropogenic Radionuclides in sediment of the Gulf of Aqaba. Yarmouk University, Master thesis, Irbid Jordan.
- 10- Motasem Al-Sayed (2008): Levels of trace metals in some Carnivorous fish of Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.

- 11- Maen batayneh (2010): Levels of trace metals in some Herbivorous fish of Gulf of Aqaba, Red Sea. Master thesis, Hashemite University, Zarka-Jordan.
- 12- 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.
- 13- 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.
- 14- Mustafa Al-Shaby: Sea cucumber as possible bioindicator for trace metal pollution in the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan.
- 15- Rawashdeh Omar (2013): levels of trace metals in Tuna fish from the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan.
- 16- Dania Abd Al-Wahhab Al-Ma'aitah (2016): Assessment of heavy metal toxicity in semi-enclosed artificial lagoons in the Gulf of Aqaba. The University of Jordan-Aqaba Branch.
- 17- Rashad Gassaymah (2015): Levels of heavy metals on mesopelagic fish species (polysteganus coerulepunctatus, Argyrops spinifer and Argyrops filamentosus) of the family Sparidae from the northern Gulf of Aqaba, Red Sea. The University of Jordan-Aqaba Branch.
- 18- Haya Mahmoud Al-Tarawneh (2016): Histo-biochemical studies of the toxic effect of envenoms extracted from Stonefish (*Synanceia verrucosa*) belonging to family Scorpaenidae, collected from the Northern Gulf of Aqaba, Red Sea. The University of Jordan-Aqaba Branch.
- 19- Shorouq Salman Ma'ayta (2015): Assessment of fish stocks from developing managements plan of fisheries in Aqaba.. The University of Jordan-Aqaba Branch.
- 20- Tasneem Shandaque (2015): Biological studies of some deep sea fishes belonging to the family spardae (Sea breams) collected from the Jordanian coast of the Gulf of Aqaba.. The University of Jordan-Aqaba Branch.
- 21- Rashad Gassaymah (2015): Levels of heavy metals in mesopelagic fish species (Polysteganus coeruleopunctus, Argyrops spinifera and Argyrops filamentosus) of the family sparidae from the Northern Gulf of Aqaba, Red Sea.
- 22- 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 Nashat

- 23- Abdalla AbuAwali (2016): Assessment of the effectiveness of Coastal Zone Management Process in The Aqaba Special Economic Zone – Jordan. The University of Jordan-Aqaba Branch.
- 24- Nashat dehayaat (2016): Levels of Pb and Cd in three species of Tuna (*Katsuwonus pelamis*, *Auxis thazard* and *Euthynnus affinis*) collected from the Jordanian coast of the Gulf of Aqaba, Jordan.
- 25- Mahamona mohammed Alnajdawi (2017): Community Structure of Gastropoda, their Distributional Patterns in Relation to Habitat and Depth in the Jordanian Coast of the Gulf of Aqaba.
- 26- Nid'a F. Al Sharari (2017): Effect of temperature on histamine levels of Tuna Fish species (*Katsuwonus pelamis*) collected from the Jordanian coast.
- 27- Sarah Al-Majali (2018): Community structure and distributional pattern of mollusca in intertidal zone at various beaches along the Jordanian coast
- 28- Khaled Al-Sokhny (2001): Biogeochemical cycles of nutrients and Chlorophyll *a* in relation to coastal currents in Jordanian waters of the Gulf of Aqaba, Red Sea. Master thesis, Yarmouk University, Irbid Jordan
- 29- Omer Bany Awwad (2002): coral larvae recruitments in the Gulf of Aqaba, Jordan. Master thesis, Yarmouk University, Irbid Jordan.
- 30- Abu- Al-Haija Mahmoud (2008): Nutrient and selected heavy metals in water, suspended matter and sediments of King Talal Dam. Yarmouk University, Irbid Jordan.
- 31- Ma'in Mohammad Al-Khawaldeh (2019): Studying the physiochemical and biological properties of seawater of the Jordanian Gulf of Aqaba for desalination purposes. Master thesis, Yarmouk University

Editorial Board of the journal:

- Jordan Journal of Biological studies
- Estuarine, Coastal and Shelf Science

Journal Reviewer:

- Oceanological and hydrobiological studies
- Estuarine, Coastal and Shelf Science
- Jordan Journal of Biological studies

List of publications

1. Al-Najjar, TH (1991) Levels of 8 trace metals in freshwater fishes of Azraq Oasis, Jordan. Master Thesis, Yarmouk University, Jordan.
2. **Al-Najjar** TH (2000) The seasonal dynamics and grazing control of Phyto- and mesozooplankton in the northern Gulf of Aqaba, Ph.D Thesis, Bremen University, Bremen-Germany.
3. **Al-Najjar** TH, 2002. Pelagi copepod diversity in the Gulf of Aqaba (Red sea).lebanese Science Journal Vol.3, No. 1, 3-16

4. Sommer U, Ulrike GB Ruth BS, Astrd C, Wilhelm H, Thomas H, **Al-Najjar TH**, Anton P, Sigrid S Herwig Sdorthea S, Stephen W 2002. Grazing during early spring in the Gulf of Aqaba and northern Red Sea. *Mar Ecol Prog Ser*. Vol. 239: 251-261
5. **Al-Najjar TH**, Badran M, Al-Zibdeh M. 2003. Seasonal cycle of surface zooplankton biomass in relation to the chlorophyll *a* in the Gulf of Aqaba, Red Sea. *Abath , al-Yarmouk Basic Science and Engineering Vol 12, No.1*: 109-118.
6. Abu-Hilal AH & **Al-Najjar TH** 2004 Litter pollution on the Jordanian shores of the Gulf of Aqaba. *Marine Environmental Research*, Vol 58, Issue 1, 39-63
7. **Al-Najjar TH**, (2004) Spatial and Temporal variations in surface zooplankton biomass distribution >150um in the Gulf of Aqaba, Red Sea. *lebanese Science Journal Vol.5, No. 1*, 17-23
8. **Al-Najjar TH**, 2004. Quantitative distribution of surface zooplankton biomass in the coastal water of the Gulf of Aqaba, Red Sea. *Dirasat, Jordan University* 31(2): 115-122
9. **Al-Najjar T. H.** 2005. Seasonal and spatial variations in mesozooplankton biomass in the most northern part of the Gulf of Aqaba during 2003. *Zoology in the Middle East Journal vol 34*: 87-92.
10. Mohammad I. B, Rasheed, M, Manasrah, R, and **Al-Najjar T. (2005)**. Nutrient flux fuels the summer primary productivity in the oligotrophic waters of the Gulf of Aqaba, Red Sea. *Oceanologia*, 47(1): 47-60.
11. **Al-Najjar T. H.** and Rasheed. M. (2005). Annual cycle of phytoplankton community structure in the Gulf of Aqaba detected by HPLC analysis of pigments. *Dirasat, pure science*, vol 32 (2): 199-202.
12. **Al-Najjar TH** and Rasheed M (2005). Zooplankton biomass in the most northern tip of the Gulf of Aqaba, a case study. *Lebanese Science Journal*, 6(2): 3-10.
- 13 **Al-Najjar TH**, Badran M , Richter C, Meyerhofer M, Sommer U (2007): Seasonal dynamics of phytoplankton in the Gulf of Aqaba, Red Sea. *Hydrobiologia*.579:69-83.
14. Cornils A, Schnack-Schiel SB, **Al-Najjar T**, Richter C (2007). Feeding of Clausocalanids (Calanoida, Copepoda) on natural occurring particles in the northern Gulf of Aqaba (Red Sea). *Marine Biology*, 151:1261-1274..
- 15 Cornils A, Schnack-Schiel SB, Badran M, Rasheed M, Manasreh R, **Al-Najjar T**, Richter C (2007) The seasonal cycle of the epipelagic mesozooplankton in the northern Gulf of Aqaba (Red Sea). *Journal of Marine System*, 68:278-292.
16. Cornils A, Niehoff B, Richter C, **Al-Najjar T**, Badran M, Schnack-Schiel (2007). Seasonality of the Abundance and Reproduction of the Clausocalanid Copepods of the Northern Gulf of Aqaba (Red Sea). *Journal of Plankton Research*, 29(1); 57-70.
17. **Al-Najjar T**, Bani Fawaz J and Abu-Hilal A. (2007). Heavy metals in zooplankton from the Gulf of Aqaba, Red Sea. *Abhath Al-Yarmouk Basic Sciences and Engineering*, 16(2):163-173.
18. Manasrah r, Zibdah M, Ougaily F, Najem Y and **Al-Najjar T**, (2007). Seasonal Changes of water properties and current in the northernmost Gulf of Aqaba, Red Sea. *Ocean Science Journal*, 24(2): 103-116.

19. Luo, J Y., Paytan, A., **Al-Najjar**, T. (2007). Using Carbon and Nitrogen Stable Isotopes and Trace Metal Concentrations in Zooplankton to Determine Seasonal and Anthropogenic Influences in the Gulf of Aqaba, Red Sea. *Fall AGU meeting*. OS11A-0192.
20. Ahmad Abu-Hilal, Rasheed M and **Al-Najjar** T. H. (2008). Dissolution of raw phosphate (apatite) in sea water of the Gulf of Aqaba: 1. Magnitude and potential environmental impact. *Chemistry and Ecology*. 24(1):51-59.
21. Ahmad Abu-Hilal and **Al-Najjar** T. H (2008). Marine litter in coral reef areas along the Jordan Gulf of Aqaba, Red Sea. *Journal of Environmental Managements* 1043-1049:1-7.
22. Al-Zibdah M, Oqaily F, **Al-Najjar** T and Manasrah R. (2008). Neighboring Cage Dish Farming Affecting Water and Seabed Quality of the Jordanian Northern Gulf of Aqaba, Red Sea. *Ocean Science Journal*, 34(1): 9-16.
23. **Al-Najjar T. H** and El-Sherbiny M. M. (2008): Spatial and Seasonal Variations in Biomass and Size Structure of Zooplankton in coastal Waters of the Gulf of Aqaba. *Jordan Journal of Biological Sciences*, 1(2): 55-59.
24. **Al-Najjar T. H.**, Bani Fawaz, J., Manasrah R., Al-zibdah M and Abu-Hilal A (2009). Variations of heavy metals concentration in suspended matter and physiochemical properties in the coastal surface water of the Gulf of Aqaba. *Jordan Journal of Biological Sciences*, 1(4): 153-158.
25. Ahmad,H Abu-Hilal and **T. H, Al-Najjar** (2009). Plastic pellets on the beaches of the northern Gulf of Aqaba, Red Sea. *Aquatic Ecosystem Health and managements*, 12(4):1-10.
26. **Al-Najjar T**; AbdelWahab S; Sayeeda M, M. Al-Zibdeh and Abu-Hilal A (2010). Heterotrophic nutrition of Giant clams from the Jordanian coast of the Gulf of Aqaba, Red Sea. *Dirasat*, 37(1): 51-59.
- 27- Zaid Q. Ababneh, Husam Al-Omari, Mohamad Rasheed , **Tariq Al-Najjar**, Anas M. Ababneh (2010). Assessment of gamma-emitting radionuclides in sediment cores from the Gulf of Aqaba, Jordan. *Radiation Protection Dosimetry*. 1–10. doi:10.1093/rpd/ncq182.
- 28- Rasheed M; **Al Najjar T**; Mohamad G. Al-Masrib; Mian S (2011). Experimental degradation of oil in permeable sand from the Gulf of Aqaba, Red Sea. *Chemistry and Ecology*, iFirst, 1–9
- 29- **Al-Najjar T.**, Rasheed M., Ababneh Z., Ababneh A and Al-Omary H. (2011). Heavy metals pollution in sediment cores from the Gulf of Aqaba, Red Sea *Natural Science*, Vol.3, No.9, 775-782.
- 30- **Tariq Al-Najjar** and Abd Al-Wahab Al-Shiyab (2011). Marine litter at (Al-Ghandoor area) the most northern part of the Jordanian coast of the Gulf of Aqaba, Red Sea *Natural Science*, **Vol.3, No.11, 921-926.**
- 31- Rasheed M., **Al-Najjar T.**, Damhoureyeh S (2011). Distributions of pigments in reef sediments, contribution of phytoplankton to organic matter budget in coral reef. *Natural Science*, **Vol.3, No.5, 344-350.**
- 32- **Al-Najjar T.**, Khalaf N., Allawi M., Disi A.(2012). Levels of Trace Metals in Two Fish Species *Caesio varilineata* and *Caesio lunaris* of the Family Caesionidae from the Gulf of Aqaba, Red Sea. *Fresenius Environment Bulletin*. 21(5): 1152-1157.

- 33- Maroof A. Khalaf, **Tariq Al-Najjar**, Mahmoud Alawi, Ahmad A. Disi. (2012). Levels of Trace Metals in Three Fish Species *Decapterus macrellus*, *Decapterus macrosomus* and *Decapterus russelli* of the Family Carangidae from the Gulf of Aqaba, Red Sea/Jordan. *Natural Science*. 4(6): 362-367 (2012).
- 34- Basem M. Jaber, Rola Al-Silawi and **Tariq Al-Najjar** (2012). Isolation and Molecular Identification of *Ascomycetes* in Sediments and Waters of the Gulf of Aqaba, Red Sea. *Natural Science*. 4(8): 555-561.
- 35- Majduleen Sbaihah, Shadeya Reyati and **Tariq Al-Najjar** (2013) Levels of heavy metals in Ophoroidea (*Ophiocoma scolopendrina*) from the Gulf of Aqaba, Red Sea. *Fresenius Environment Bulletin*. Vol 22 (12):
- 36- Maroof A. Khalaf, Mahmoud Alawi, Ali Al-Zgool, **Tariq Al-Najjar** (2013) Levels of Trace Metals in the Bigeye hound Deep Sea Shark *Iago Omanensis* from the Gulf of Aqaba, Red Sea. *Fresenius Environment Bulletin*. Vol 22 (12): 3534-3540.
- 37- Leonardo Laiolo, Alberto Barausse, Zvy Dubinsky, Luca Palmeri, Stefano Goffredo, Yury Kamenir, **Tariq Al-Najjar**, David Iluz. (2014). Phytoplankton dynamics in the Gulf of Aqaba (Eilat, Red Sea): A simulation study of mariculture effects. *Marine Pollution Bulletin* 86 (2014) 481–493
- 38- Luo J, Paytan A, **Al-Najjar, T** (2006). Using Carbon and Nitrogen Stable Isotopes and Trace Metal Concentrations in Zooplankton to Determine Seasonal and Anthropogenic Influences in the Gulf of Aqaba, Red Sea. *American Geophysical Union*.
- 39- Luo J, Paytan A, **Al-Najjar, T** (2007). Carbon and Nitrogen Stable Isotopes of Zooplankton Tows from the Gulf of Aqaba, Red Sea: Indicators of Anthropogenic Influence? *American Geophysical Union*.
- 40- **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.
- 41- **Al-Najjar, T**; Al-Momani, R; Khalaf, M; Wahsha, M; Sbaihah, 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.
- 42- **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*. Volume (25) No. 12/2016, 5253-5260
- 43- Klaus B, Alhejoj I, **Al-Najjar, T** (2016). Pickworthiidae and Aqabarellidae new family (Caenogastropoda, Mollusca) of the Gulf of Aqaba, their larval shells and remarks about their evolution and relation. *Natural Science*, 2016, 8, 403-430.
- 44- Mohammad Wahsha, **Tariq Al-Najjar**, Haya Al-Tarawneh, Maroof Khalaf, Amer Saad (2017). Biochemical and Histological observations of lung injury after

- stonefish (*Synanceia verrucosa*) envenomation in BALB/c, Fresenius Environment Bulletin, Vol. 26 (12): 7204-7208.
- 45- **Tariq Al-Najjar**, Mwaffaq Al Khushman, Maroof Khalaf, Mohammad Wahsha, Khalid Abu Khadra (2017) of heavy metals in two fish species Iago omanean sis and Auxis thaza Levels from the Gulf of Aqaba, Red Sea. Fresenius Environment Bulletin, Volume 26 No. 12A/2017 pages 7806-7814.
 - 46- Ahmad M. Khalil, Mohammad A. Wahsha, Khalid M. Abu Khadra, Maroof A. Khalaf, **Tariq H. Al-Najjar** (2018) Biochemical and histopathological effects of the stonefish (*Synanceia verrucosa*) venom in rats. Toxicon, 142 (2018) 45e51.
 - 47- **Tariq Al-Najjar**, Mustafa Alshabi, Mohammad Wahsha, Ahmad Abu-Hilal (2018) trace metals concentration of sea cucumber (*Actinophyga bannwarth* and *Holothuria impatiens*) from the red Sea, Gulf of Aqaba. Fresenius Environment Bulletin, Volume 27 – No. 5A/2018 pages 3740-3745.
 - 48- **Tariq Al Najjar**, Mohammad Al Tawaha, Mohammad Wahsha, Ahmad Abu Hilal (2018) Heavy metals in the sea urchin *Diadema setosum* from the Gulf of Aqaba. Fresenius Environment Bulletin, Volume 27 – No. 6/2018 pages 4149-4155.
 - 49- **Tariq Al-Najjar**, Nashat Dahiyat, Maroof Khalaf, Nida Sharari, Mohammad Wahsha (2018) Levels of Pb and Cd in three species of Tuna (*Katsuwonus pelamis*, *Auxis thazard* and *Euthynnus affinis*) collected from the Jordanian coast of the Gulf of Aqaba, Red Sea. Fresenius Environment Bulletin, Volume 27 – No. 6/2018 pages 4277-4284.
 - 50- Majduleen Sbaihah, Mohammad Wahsha, Khalid Abu Khadra, **Tariq Al-Najjar** (2018) Trace elements concentrations in sea star (*Astropecten polystecanthus*) from the Ayla Lagoons at western part of Jordanian GFulf of Aqaba, Red Sea. Fresenius Environmental Bulletin, Volume 27 – No. 10/2018 pages 6918-6923.
 - 51- Maroof A. Khalaf, Shorouq S. Ma'ayta, Mohammad A. Wahsha, Riyad S. Manasrah & **Tariq H. Al-Najjar** (2018) Community structure of the deep sea fishes in the northern Gulf of Aqaba, Red Sea (Osteichthyes and Chondrichthyes). Zoology in the Middle East. ISSN: 0939-7140 (Print) 2326-2680 (Online) Journal homepage: <http://www.tandfonline.com/loi/tzme20>.
 - 52- Mohammad Wahsha, Haya Al-Tarawneh, Maroof Khalaf, Tariq Al-Najjar, Walid Al-Zyoud (2019) HISTOLOGICAL AND FUNCTIONAL RENAL ALTERATIONS CAUSED BY *SYNANCEIA VERRUCOSA* VENOM IN MICE. Fresenius Environmental Bulletin. 28 – No. 7/2019 pages 5294-5300.
 - 53- Tariq Al-Najjar*, Nashat Dahiyat, Nida Sharari, Mohammad Wahsha, Maroof Khalaf (2019) LEVELS OF MERCURY IN THREE SPECIES OF TUNA (*KATSUWONUS PELAMIS*, *AUXIS THAZARD* AND *EUTHYNNUS AFFINIS*) COLLECTED FROM THE JORDANIAN COAST OF THE GULF OF AQABA, RED SEA. Fresenius Environmental Bulletin. Volume 28 (5), 4304-4310.

54- Abba Salisu, Muhammad Al-Zibdah, Tariq Hasan Al-Najjar (2019) Can Powdered Microencapsulated Whole Egg, *Ulva lactuca* and Grasshopper Improve Growth Performance and Economic Viability of African Catfish (*Clarias gariepinus*) Fry? *Aquaculture Studies*, 19(2), 125-132.
http://doi.org/10.4194/2618-6381-v19_2_05.

55- Killam, D., Thomas, R., Al-Najjar, T., & Clapham, M. (2020). Interspecific and intrashell stable isotope variation among the Red Sea giant clams. *Geochemistry, Geophysics, Geosystems*, 21, e2019GC008669.
<https://doi.org/10.1029/2019GC008669>

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Committee member:

- 1- Committee member of Environment deterioration Board of ASEZA.
- 2- Committee member of Jordanian Biodiversity research group.
- 3- Committee member of Jordanian National Ballast Water Managements team
- 4- Committee member of biofouling Board of ASEZA. 2019.
- 5- Committee member of Aqaba Marine Bark
- 6- Technical committee member of gas terminal megaproject, ADC, Aqaba, 10-17/July 2013.
- 7- Technical committee member of seawater standards in the Gulf of Aqaba, ASEZA, 2013
- 8- Technical committee member of (LPG) liquid petroleum Gas Terminal megaproject, ADC, Aqaba, 13-21/August 2013.
- 9- Technical committee member of (NPG) Natural petroleum Gas Terminal megaproject, ADC, Aqaba, 13-21/October 2013.
- 10- Technical committee member of Industrial Jetty deterioration, ASEZ, 2016.
- 11- Member of working group of initiation Marine protected areas, at Aqaba 2020.
- 12- Member of National working group of biofouling, at Aqaba 2020

Reports

1. Environmental impact assessment for the ports relocation project (2007).
2. Coral mapping at the southern and middle ports areas in Aqaba (2007)

3. Coral mapping at the southern and middle ports areas in Aqaba (2007)
4. Coral mapping at the middle ports areas in Aqaba (2007).
5. Environmental appraisal of the Jordanian coast of the Gulf of Aqaba, Red Sea. Jordan's national monitoring program. Annual reports 2004-2010.
6. 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.
7. 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.
8. 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.
9. Dead-Red Bottom sediment studies at the north most portion of Aqaba Gulf. Dar Al-Handasa, September, 2016.
10. Many progress reports for the research projects.
11. Progress report of the Faculty of Basic and Marine Science achievements for 2019-2020.
12. Preparation of Ecotourism master programme in collaboration with Faculty of tourism and hospitality management. (2017-2020).

Consultations

- Red Sea-Dead Sea Conduit World Bank project; team leader ecology group.
- Environmental Impact Assessment and mitigation of the relocation of ports to the south industrial complex.
- Consultant for the New Phosphate re-location project (coral mapping project).
- Consultant for the impacts of phosphate on the coral reefs at the south industrial complex.
- Consultant in Ayla lagoon project for the Marine Biological component.
- Consultant in Red-Dead Sea conduit project for the Marine Biological component.
- Coral mapping at the southern and middle ports areas in Aqaba, Project member.
- Coral mapping at the middle ports areas in Aqaba, Project member.
- Consultant in PERSGA for Jordan National Ballast water strategy,

- National monitoring program: Team Leader of zooplankton biomass.
- JFI monitoring program, team member.
- 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: Team member.
- Quantitative Survey of the Coral Reefs at the site of rehabilitation and Extension of the Industrial Terminal Project In South Port, Aqaba, Green Environment Foundation, February 2016.
- Red Sea Dead Sea water conveyance project: Phase 1, Plankton Survey (June 2017).
- Red Sea Dead Sea water conveyance project: Phase 1, Ecological Appraisal of benthic habitats at northern Gulf of Aqaba with emphasis on grass beds. Royal Harkening, (May 2017).
- Sediment Core Collection for Phosphate, Polluted Soil Estimation and Benthic Habitat Survey at Aqaba Main Port. Environmental Baseline Study, Dar Al-Omran, July 2017
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Scientific activities

- 1994:** -Adhoc Expert Group Meeting on Marine Hydrographic Surveying Nautical Charting, 8-12 May (Amman: Jordan)
- 1995:** -Microwave Digestion, Ashing and Moisture/ Solid Determination, By Scientific & medical suppliers, Milestone Microwave Technology, 22 April (Amman; Jordan)
- 1996:** - Training Course in beach management in the Mediterranean and Black Sea, by FEuro- Mediterranean Centre on Insular Coastal Dynamics (ICOD), Foundation for International Studies, 11-17 May (University of Malta).
- Training Course in Coastal zone Management as Sustainable Process, by International Ocean Institute Operational Centre, 1-31 October (India).
 - UNESCO Course on Utilization of Remote Sensing Technology in Coastal-Marine Research and Management, 21-26 December (King Abdelaziz University, Jeddah, Saudi Arabia).
- 1997:** - Visit to Central of Tropical Marine Ecology (ZMT) for Literature Survey and Registration in Bremen University as Ph.D Student, 4 June- 18 July, Bremen.
- Red Sea Program (RSP), Junior Course ,(Eilat), 12-21 March.
- 1998:**-Visit to Marine Potany Department, for training on HPLC for pigment analysis and GC for Fatty acid analysis,1-28 March (KIEL), Germany.

- Third general assembly ,Red Sea Program on Marine Science,10-15 March Bremen, Germany.
- Training on zooplankton identification , 18-28 April, Suez (Egypt).
- Red Sea Program research cruise: Molecular function controlling the ecology of marine microorganisms in the Red Sea :Nitrogen fixation among marine phytoplankton, 31 May –9 June.,Eilat.

1999:- Visit to the Institute for Marine Science (ifm) ,Kiel, for completion of Ph.D work.

2001:- International workshops on the Marine Biodiversity in Islamic Countries, Algiers, October 22-24, 2001.

2002:- Symposium and Workshop of the Butterfly fish, 19-20, June 2002, Aqaba-Jordan

2003:- Third international zooplankton symposium, 20-23-May, 2003. Geqion, Spain

- Frontiers of science and engineering, September 21-23, KOC University, Istanbul, Turkey.
- Workshop on beach replashment, 15-17-December, 2003.
- Workshop on the solid wast managements and biogas production, 22-24 December, 2003.

2004:

- Coordinator of the Jordanian Coordinated National Monitoring Program
- Committee member of Environmental Impact Assessment Board of ASEZA.
- 4th international conference on hazardous materials, Aqaba 8-10 June, 2004

2005:

- Visiting Scholar research in Stanford University department of Geophysics, Stanford, California, USA for period of three months June to August 2005.

2006: - Global Energy Solution project (EIA) project discussion, 18 April 2006 Movenpick hotels Aqaba-Jordan.

- The Environmental impact of industry in the Aqaba Special Economic Zone Authority workshop, Jordan Environment Society, 6 March 2006, Aqaba-Jordan.
- Lunch events for Interaction Mosaic and Customized your curricula, 18 April 2006 Movenpick hotels Aqaba-Jordan.
- Visiting Scholar research in Hamburg University department of Geology, Hamburg, Germany for period of two months 17 July to 17 September 2006.

2007:

- Middle East frontiers of Science and Engineering, March, 19-21 Seville, Spain.
- Information Seaway Workshop towards Aqaba the smart Gulf. Inter Continental Aqaba Resort, Jordan, Aqaba, 18 April 2007.
- International conference in (Rapid Urbanization and land use conflicts in coastal cities) 30 October-01 November 2007, Aqaba-Jordan.
- Jordan Stakeholder workshop on National program action for protection of the marine environment from land-base activities, Aqaba marine park 11 th November, 2007.

2008:

- Advanced Phytoplankton Course Taxonomy (APC), Stanza Zoologica, Italy Napole 5-26 April 2008.
- International conference in (Middle Eastern Biodiversity congress) 20-23 October 2008, Aqaba-Jordan.
- International Ballast water management workshop. November 2008, Aden, Yemen.

2009:- Training in the Fundamentals and theory of SeaSonde operation, 27-1 May 2009, Mountain View, USA.

- PCBI Project preparation workshop Jordan mediterranean Sea Basin ENPI CBC Programme 2007-2013. Aqaba 18-May 2009.

2010:- National workshop on Balast water management 14-16 february 2010, Aqaba-Jordan

- Visiting International lcairo book festival, Cairo 27- 4 February 2010.
- Bio vision Alexandria 2010 New life Science: Future Prospects 11-15 April 2010, Alexandria Egypt: www.bibalex.org/biovisionalexandria.
- Balast water workshop, 18 April 2010, Aqaba-Jordan.
- Embryology of Marine Invertebrates, 4-21 July 2010, Syberia, Russia
- Taxonomy workshop 16 September -2 October 2010, Izmir-Turkey

2011:

- Meeting of working group of Dead Red canal visibilitiy study, March, 2011/ Venice Italy.
- Winter school in water quality and esting, 2-8 April, 2011/Aqaba-Jordan.
- Summer scholl of Columbia University, 2-23 June 2011
- Aqaba.

2012:

- First workshop of the potanica Garden, 12 Jan 2012 Amman.
- 1st regional Training workshop National Council for Scientific Research –CNRS Beirut, Lebanon, 25 – 26 January 2012.

- Extensive Two-day Training Workshop on: Understanding the Science of Environmental Governance and Building Capacity of Skills of Development of Environmental Policies and Strategies Related to Implementation of Rio Conventions in Jordan and Integration of Conventions' Provisions into National Development Planning. Developing Policy-relevant Capacity for Implementation of the Global Environmental Conventions in Jordan "CB-2" Project. Ministry of Environment & UNDP, 25-26 February 2012 Crown Plaza hotels, Amman, Jordan.
- The 2nd Regional Meeting on the Status of Elasmobranchs in the Red Sea and Gulf of Aden, 23-24 August 2012, Jeddah, KSA.
- First workshop on developing policy-oriented research, Amman, 20-21, March 2012
- National Training workshop on IMO OPRC Level 2 and updating the national oil spill and HNS contingency plan Jordan-Aqaba, 8-11 April 2012.
- Training workshop on Compliance Monitoring and enforcement of Ballast Water Management. Aqaba, Jordan: 28-29 May 2012.
- **The 6th Jordanian Environmental conference in Amman**, 4-6 June 2012.
- Adaptation of biodiversity with climate changes workshop, Amman, Alfanar hotel 14-6-2012.

2013:

- Integrated coastal zone management training course phase 4, Aqaba 27 January till 7 February, Aqaba 2013.
- Managing the Environmental Sustainability of Port for a Durable Development., Aqaba 26-3-2013, Kempinski hotel.
- Coastal Zone Jordan university Aqaba branch 10-11/6/2013.
- CUSTOM MED international conference, Kempinski, Aqaba 16-6-2013 , 9-5-2013 Movenpick hotel Aqaba - التراب في امال

2014

- Kick off Meeting for the project: Inclusive Governance for sustainable Mediterranean coastal Metropolis (MEDSEATEDS). Mercelia, France 20-21 January.
- International conference on Marine Invasive Species: Management of Ballast water and other vectors, Oman, MasKat 17-19 February 2014.
- Aquanight 2nd international conference, ENPI- CBCMED project. Aqaba 26-5-2014, Kempinski hotel.

- PERSGA Strategic Ecosystem Based Management project first consultation meeting: Inception report and Arrangement for conducting the first years activities Aqaba, September 01st-2nd 2014.

2016

- Capitalization workshop, Steering Committee Meeting: Inclusive governance of sustainable coastal metropolis. MARCH 22Nd & 23RD 2016 Marseille
- الملتقى الاعلامي الاول للبيئه و للتنميه المستدامه-العقبه 2016-8-15

2017:

- Development of Guidelines for the Assessment and valuation of Ecosystem services in Jordan-Part II, giz, Amman, 30-3-2017, Sheraton Hotel.
- Visiting researcher at University of California Santa Cruz, USA August 2017-June 2018.

2018:

- Training course on Ifm desalination monitoring water 8-12, June 2018 Marine Science Station, Aqaba under SCARCE project.
- STRENGTHENING HUMAN RESOURCES, LEGAL FRAMEWORKS AND INSTITUTIONAL CAPACITIES TO IMPLEMENT THE NAGOYA PROTOCOL, Aqaba, Helton, Double Tree Hotel, 8-9/8/2018 organized by JEF, UNDP and Ministry of Environment.
- Training on Economic Valuation of Ecosystem Services, Aqaba, Jordan, 24th to 27th -9 September, 2018.
- Fourth Aqaba Youth meeting, Jordan University, Aqaba 15/11/2018.

2019:

- Jordanian maritime Day, Inter continental Hotel, Aqaba-Jordan 10 February 2019.
- Assessment and Revision of the National Coastal Monitoring Program, Aqaba, Jordan “NCMP” Second Stakeholders Workshop Provisional Program, Tuesday, Wednesday February 5th – 6th 2019.
- Drug Discovery Research from Natural Products (Plant Extracts), Aqaba university of Technology, Aqaba-Jordan 7 March 2019.
- Workshop to promote knowledge about the Rio conventions and the Nagoya Protocol. Aqaba-Jordan, Movenbek Hotel, 14-3- 2019.
-
- DESIRE-developing of higher education teaching modules on the socio-economic impacts of the Renewable Energy. Aqaba Intercontinental Hotel, 28-30 March 2019.

- Draft Agenda – Jordan Maritime Governance (JOR3), Aqaba, Hilton Hotel on 16th – 17th April 2019.
- The 3rd German-Arab Environment and Energy forum. Shaping transition Sustainable: Future Technology for Today. February 23-26, 2019, Amman and Aqaba, Jordan.
- Implementation of Access and benefit Sharing (ABS) of genetic resources in Jordan a practical approach, 17-18-7-2019 Hilton, Dead Sea.
- Focus group meeting of Desalination, Diplomacy and water Reuse in Middle East (SCARCE) project funded by DUPC2.(Amman, Jordan 13-July 2019.
- Promoting youth employment in remote areas in Jordan
JOB JO. Cyprus 25-30, November 2019. ERASMUS+ PROGRAMME.
Project Number: 598428-EPP-1-2018-1-JO-EPPKA2-CBHE-JP.

2020:

- 1st Memmber meeting of working group for biofouling at Aqaba, JMA, JMA, 23-2-2020.
- Memmber of working group meeting of intiation Marine researved are, at Aqaba, ASEZA, Marine Park, 23-6-2020.
- 2nd Memmber meeting of working group for biofouling at Aqaba, JMA, JMA, 23-2-2020.
- Plastic pollution workshop, Aqaba, Movenbeak hotel, 6-7/9/2020.
- Memmber of working group meeting of intiation Marine researved are, at Aqaba, ASEZA, Marine Park, 23-10-2020

Current research projects and Activities:

- 1996-present: Monitoring of the Marine Environment in front of the Industrial Complex. Funded by Industrial Complex in Aqaba.
- 2001-present: Monitoring of the environmental quality of the Jordanian coast of the Gulf of Aqaba, National Monitoring Program. Funded by Aqaba Special Economic Zone Authority (ASEZA).
- 2004-2006: The Red Sea Marine Peace Park (RSMPP); Fast Track Project. Collaboration with ASEZA Funded by USAID.
- 2004-2007: 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. Funded by the Higher Council For Science and Technology-Jordan.
- Monitoring natural and anthropogenic aerosol pollution and its impact on ecosystem in the Gulf of Aqaba November 2006-November 2009. NATO funded project No: SFP. 982161.
- The Protection the Gulf of Aqaba from the anthropogenic and natural stress in the face of Global climate changes. Aqaba Anthropogenic Stress. 2007-2012

- Real time surface current measurement to protect the Gulf of Aqaba against intentional or accidental toxic and oil spills. 2006-November 2009. NATO funded project No: Sfp. 982220.
- Assessment of heavy metals, Natural and anthropogenic radionucleotides pollution in the Gulf of Aqaba. Funded from Yarmouk University. January - December 2008.
- Assessment of zooplankton community structure in the most northern part of the Gulf of Aqaba (new port area): An introduction for ballast water managements. 2010- 2011.
- Managing the environmental sustainability of ports for a durable development- (MESP), ENPI-CBC funded project. 2011-2014
- Inclusive Governance for sustainable Mediterranean coastal Metropolis (MEDSEATEDS), ENPI-CBC funded project. 2014-2016.
- ‘SCARCE – Desalination, Diplomacy and Water Reuse in the Middle East’, Project No. 106537 - Sub- project: Seawater Desalination. January 2017-November 2018.
- Measuring the response of engineering species (coral and seagrass) to the combined effect of global and local environmental changes in the Gulf of Aqaba, M38--13." for funding (Total Budget: \$ 448,118.00 / **MSS \$257,477.00**), 2020-2022.
- Developing Strategies to Minimize the Impacts of New Desalination Facilities on the Gulf of Aqaba Ecosystem. for funding (Total Budget: \$ 980,000 / **MSS \$380,000**).2020-203.

Field of interest:

The main interest of mine is focusing on the study of Oceanography of the Gulf of Aqaba in general, specifically plankton research in the Gulf of Aqaba in which the following titles could be covered:-

- 1- Phytoplankton dynamics in the water column in relation to the water stratification phytoplankton groups will be identified by using a marker pigment analysis (HPLC) study.
- 2- Seasonal distribution of Plankton (Phyto and zooplankton) in the Gulf of Aqaba, and the effect of physical variability on the zooplankton population dynamics in the Gulf of Aqaba.
- 3- Desalination, Diplomacy and Water Reuse in the Middle East.
- 4- Studing of the Physico-chemical environment of the Gulf water.
- 5- Fossil coral reefs as paleo-hydrological archives: Examples from buried and elevated reefs in the Gulf of Aqaba.
- 6- Monitoring natural and anthropogenic-induced pollution in the Gulf of Aqaba.

- 7- Protection of Gulf of Aqaba against anthropogenic stress during climate changes.
- 8- Gut-content analysis of zooplankton mainly the copepods to give us information about grazing of zooplankton on the phytoplankton in the Gulf of Aqaba as well as information about the feeding rhythm of zooplankton in the oligotrophic waters.
- 9- Fatty acid analysis of Plankton (Phyto-zooplankton) in order to evaluate the feeding capability.
- 10- Studing the Molluscan Planktonic larvae in the Gulf of Aqaba.
- 11- Nutrition of the Giant clam.
- 12- Trace metal bioaccumulation by fishes, zooplankton, seagrass, Foraminefera, seacucumber and marine Algae.
- 13- Trace metal accumulation in Gastropod species in the Gulf of Aqaba, A possible using it as bioindicator for trace metal pollution.
- 14- Natural and anthropogenic radionucleotides pollution in the Gulf of Aqaba.
- 15- Ballast water managements
- 16- ROV desalination, Teqnology and innovation uses for sea water.
- 17- Biofouling formation and prevention in Marine Environment of the Gulf of Aqaba.