Dr.: Tarek Abdel-Aziz Ahmed Mohammed

Associated Prof. Dr. of the marine invertebrates in the National Institute of Oceanography and Fisheries, Hurghada Branch, Red Sea, Egypt. (specialized in coral reefs biology, and ecology.



PERSONAL INFORMATIONS

Nationality : Egyptian.

Date and place of birth : 01/01/1971 Al-Kanater El-Khaerea, Al-

Kalubia, Egypt.

Military Service : Completed.

Marital status : Married, two kids. *Home Phone* : (065) - 3551118

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Specialization : Marine Invertebrates, Zoology (Aquaculture,

Environmental and Biological studies on Coral

Reefs).

POSITION AND WORK ADDRESS

Position: Assoc. Prof. Dr. of Marine Invertebrates in the National

Institute of Oceanography and Fisheries since November

2009.

Assistant manager in the National Institute of Oceanography and Fisheries since November 2009 up till

now.

Work address: National Institute Of Oceanography And Fisheries, Red

Sea Branch, Hurghada, Red Sea, Egypt.

Associated Prof. and Lecturer of Zoology in Faculty of Education at Hurghada, South Valley University, since 2006 to 2011.

EDUCATION AND ACADIMIC BACKGROUND

1992 : B. Sc. Degree in Zoology. Qena Faculty of Science,

Assiut University, Qena, Egypt.

1996 : Diploma in the general Zoology, Faculty of Science,

South Valley University, Qena, Egypt.

1998 : M. Sc. Degree in Zoology. Zoology Department, Faculty

of Science, South Valley University, Qena, Egypt. The title:
"Studies On Certain Parasites Of Some Fishes From The

Red Sea."

2003 : Ph.D. philosophy of science Degree, Zoology. Faculty of

Science. Zoology Department, Suez Canal

University.Ismailia, Egypt. The title: "Study Of Growth and Reproduction Of Some Corals At Hurghada Region With Reference To The Effect Of Some Pollutants In The Area."

2009 : Assoc. Prof. in Marine Invertebrates at 2nd November.

M.Sc. and Ph.D. THESES

- Mohammed, T. A. A. (1998). "Studies On Certain Parasites Of Some Fishes From The Red Sea.". M. Sc. Thesis South Valley University. Faculty of Science. Zoology Department. 181p.
- Mohammed, T. A. A. (2003). "Study Of Growth and Reproduction Of Some Corals At Hurghada Region With Reference To The Effect Of Some Pollutants In The Area." Ph.D. Thesis. Suez Canal University. Faculty of Science. Zoology Department. 204p.

SUPERVISORS OF M.Sc. and Ph.D. THESES

- Prof. Dr. Fathy Abdel-Aty Abdel-Ghaffar, Zoology Dept. F. Sci. Cairo Uni.
- Prof. Dr. Abdel Fattah A. Ghobashy, Zoology Dept. F. Sci. Suez Canal Uni.
- Prof. Dr. Mohammed S. El-Deek, Marine Chemistry, National Institute of Oceanoghraphy and Fisheries, Hurghada, Red Sea.
- Dr. Mohammed M. A. Kotb, Marine Science Dept. F. Scie. Suez Canal Uni.
- Dr. Soheir Ahmed Hamdi Rabie, Zooligy Dept. F. Sci. Qena, South Valley Uni.

CONFERENCES AND SCIENTIFIC SYMPOSIUMS

- Sharing in the 15th International conference of the Egypt. German Soci. Zool. Ein Shams Uni. and Hurghada 26 Feb. to 2 March.
- 2005: Sharing in the "International Conference on Aquatic Resources of the Arab region", 7-9 May, 2005, Alexandria, Egypt.
- 2006: Sharing in the "1st International Conference on Aquatic Resources: Needs and Benefits", 18-21 September, 2006, Alexandria, Egypt.
- 2007: Sharing in the "1st International Conference of the African Society on the Sustainable Development of the Red Sea region and Gulf of Aden. Ein El-Sukhna 25-27 November.
- 2008: Sharing in the "1st Scientific Conference of Education Faculty of Hurghada on the Integration of Science,

Education and Decency in preparing the Teacher of the 21st Century". Hurghada 23-24 Feb.

2008: Sharing in the "2nd International Conference on Aquatic Resources: The Integrand Coastal Management and Development", 22-25 November, Alexandria, Egypt.

Sharing in the 7th International Conference of the Future Horizons for the Environmental Development in the Arabian country and the challenges Confrontation. Hurghada 17-20 April.
 Sharing in the 4th International Conference on Aquatic

2010: Sharing in the ^{4th} International Conference on Aquatic Resources "Preservation, Protection and Development" ICAR, Alexandria 7th – 9th December.

TRAINING COURSES AND WORKSHOPS

1994: Training course in introduction of computer and DOS (Operating system of computers).

1995: Training course of computer in Windows, Word, Excel, Spss and Statistical Programs (1995).

1996: Training course in diving (Open water **diving**) PADI, Hurghada - Egypt.

1996: Training course and workshop on Environmental Impact Assessment (EIA 7-12 September) provided by University of Alexandria Research Center.

1997: Training course in the Marine ecology and Oceanography in the Marine Biological Station, Hurghada.

1997: Training courses in the marine surveying systems and the related computer programs in the NIOF, Red Sea Branch.

1997: Training course on the Heat choke protein of soft corals and sponges in Germany by the Red Sea programs in 1997 (July-October in the Molecular Bio-chemical Institute at Mainz).

1998: Training course on the Coral Reefs transplantation managed by the Red Sea programs 22-27 March.

2002: Sharing in the workshop on "The Biological competing for diseases transmissions by use of save and friendly alternative to the environment" in the Red Sea Hospital during 5-6 September.

2004: Sharing in the workshop on "Regional Environmental Monitoring Network" 24 February.

2006: Sharing in the workshop on the "Coral Reefs and the Accompanied Organisms in the Red Sea, Economics and their Protection Methods" 22-24 May. Hurghada Information Centre.

2007: Sharing in the training circuit on the "E-Content and building web page on 25 Feb.- 6 March, Faculty of Education, Hurghada.

2007: Success in the Training course of the "IT Contents" from Cambridge Uni. 10 June – 3 July.

2007: Sharing in the 2nd workshop on the "Coral Reefs and the Accompanied Organisms in the Red Sea, Economics and their Protection Methods" 9-10 September. Hurghada Information Centre.

2007: Sharing in the workshop on the FP7 Program, Faculty of Education, Hurghada, September.

2008: Sharing in the TOT Program of the Pathways managed by Cairo Faculty, 6-10 May.

2008: Sharing in the workshop on "Ichthioplankton coral reef fishes of the Red Sea" National Institute of Oceanography and Fisheries, 28 October.

2010: Sharing in the workshop on the "Dangers of the solid wastes on the Red Sea wealth's" 14 January.

2010: Sharing in the workshop on the "Environmental hazards caused by invasive species on the Egyptian aquatic habitats and the role of ballast water in their transition". Marine Sciences Dept. Faculty of Science, Suez Canal Uni. Ismailia 27 April.

2010: Sharing in the workshop on the "Fish culture projects in the Red Sea" at Hurghada in 11 May.

2010: Sharing in the workshop on the International day of Environment of Biodiversity entitled "Many species, One planet, One future" at the Environmental Affairs Agency, Red Sea, 6th June.

NATIONAL AND INTERNATIONAL PATENTS

2010: Sharing in the International Patent on the use of steel slag as a substrate for coral reefs transplantation and restoration. 1st April.

DUTIES AND RESPONSIBILITIES

1998-2000: Responsible for the Aquarium, National Institute of Oceanography and Fisheries, Hurghada, Red Sea.

2005-2006: Share in the headship of the Hurghada Marine Biological Station in the case of absence of the Station chief.

2007-2008: Share in the headship of the Hurghada Marine Biological Station in the case of absence of the Station chief.

2009-2011: Share as assistant directorate of the National Institute of Oceanography and Fisheries, Red Sea Branch, Hurghada in the case of absence of the director.

SHARE IN TRAINING TRAINER & LECTURE DECLIMATION

2005: Sharing with a lecture in the Environmental Pioneer Association on "Maintenance of the Coral Reef is an Economic Importance" at Mara Alam 24-26 March.

2006: Sharing with a lecture in the Environmental Pioneer Society on "The Formation of the Coral Reefs and its Importance" at Hurghada at 11 September.

2006: Sharing with a lecture in the Faculty of Education at Hurghada during the 1st rendezvous communal on "The Economic and Dangerous Coral Reef Fishes in the Red Sea", 20 December.

2007: Sharing with a lecture in the Faculty of Education at Hurghada during the 2nd rendezvous communal on "Human, Environment and The Coral Reef", 6 March.

2007: Sharing with a lecture on "The Growth, reproduction and the Feeding of the coral Reefs in the Red Sea" During the Training course on the "Coral Reefs and the Accompanied Organisms in the Red Sea, Economics and their Protection Methods" 9-10 September in the Hurghada Information Centre.

2008: Sharing in training the Faculty students in the "Pathway to Higher Education, Egypt" Managed by Cairo University 7-17 July.

2008: Sharing by a lecture for awareness on the coral reefs transplantation, growth and the dangerous fishes in the Red Sea for the students of Assiut Azhar Uni. From 1st July to 31.

2008: Sharing in the workshop and training during the "Marine Day" at Faculty of pharmacy on "Coral Reefs: Their structure, growth, and reproduction, its importance in the medical fields and the bioactive materials extracted from them". At Beni swif Uni. 3-4 December.

2010: Sharing with a lecture in the Faculty of Education at Hurghada during the 3rd rendezvous communal on "The Coral Reefs and the accompanied organisms and their Protection Methods", 17th March.

2010: Sharing in the training course of the "national and international competitive researches projects" done by

Sufficiency development Center of the teaching form members of South Valley Uni. form 8th – 10th June.

Sharing with a lecture in the training course on Marine Sciences entitled "Red Sea resources and their Protection Methods" at NIOF Hurghada Branch 23 November to 1st December.

INTERNATIONAL TRAINING COURSES

2003: Sharing in the workshop on "The Biology and Production of Sea cumber" at the Marine Biological Station (National Institute of Oceanography and Fisheries, Hurghada Branch), for the Saudian Trainers, 15-30 November.

2004: Sharing in the workshop on "The Biology and Production of Sea cumber" at the Marine Biological Station (National Institute of Oceanography and Fisheries, Hurghada Branch), for the Sudanese Trainers 15-28 February.

2007: Sharing in the workshop on "The Marine environment and Fish parasites of the Red Sea" at the Marine Biological Station (National Institute of Oceanography and Fisheries, Hurghada Branch), for the **Yamani** Trainers 2-12 August.

2008: Sharing in the workshop on "The Marine environment and Coral Reefs Transplantation" at the Marine Biological Station (National Institute of Oceanography and Fisheries, Hurghada Branch), for the **Yamani** Trainers 3-7 July.

SCIENTIFIC FIELDS INTEREST

- 1) The environmental impact assessment of many projects on the marine ecosystems such as desalination plant, wastewater treatment station, jetties, beach enhancement, full EIAs...etc.
- 2) Trace metal pollution in the marine Invertebrates and environments.
- 3) Coastal lagoons and coastal zone management along the Red Sea
- 4) Coral reef growth, reproduction and evaluation.
- 5) Histological studies for coral reef.
- 6) Mollusks studies and association with other benthos.

OTHER ACTIVITIES AND EXPERIENCES

1996/2011: Share in the Applied Environmental Impact Assessment (EIA) Studies in the Red Sea Coast, Egypt.

2002/2003: Sharing in the annual plan of the Hurghada Research Station on some coastal lagoons along the Red Sea.

2003/2004: Sharing in the annual plan of the Hurghada Research Station on the Mangrove and coral density at Wadi El-Gemal and Gulaan area southern Marsa Alam.

2004/2005: Sharing in the annual plan of the Hurghada Research Station on the different human impacts including petrol, tourist, desalination plant and phosphate sites.

2005: Membership in the J. of Egyptian German of Zoology.

2006: Sharing in the Quality Assurance and Accreditation Unit of Faculty of Education at Hurghada.

2010: Sharing in the regularization committee of the "7th International Conference of the "Future horizons for the environmental development in the Arabian country and the challenges confrontation". Hurghada 17-20 April.

2010: Sharing in the regularization committee of the training course on Marine Sciences entitled "Red Sea resources and their Protection Methods". At NIOF Hurghada Branch 23 November to 1st December.

2010: Membership in Abu-Salama Institution for the Protection of marine environment and coral reefs, November 2010.

SCIENTIFIC THESIS SUPERVISION DUTIES

* Sharing in the supervision on the following Thesis:

2006: M. Sc. Thesis on "Studies on Soft Corals (Octocorallia, Alcyonacea) Inhabiting Coral Reefs of Some Red Sea Areas, Egypt. ". Zoology Department, Faculty of Science, Tanta University. (discussed and finished in 2009).

2008: M. Sc. Thesis on "Phytochemical and Biological studies on *Lobophytum* species of Red Sea soft corals". Faculty of pharmacy. Beni Swief Univ. since June 2008.

2008: M. Sc. Thesis on "Phytochemical and Biological studies on some *Heteroxenia* species of Red Sea soft corals". Faculty of pharmacy. Beni Swief Univ. since June 2008.

2011: M. Sc. Thesis "Growth rates and skeletal density relationship of some coral reefs at Shlateen area, Southern Red Sea Governorate, Egypt. ". Zoology Department, Faculty of Science. Assiut University".

* Internal supervisor on the following Thesis:

2010: M. Sc. Thesis on "Studies on the endoparasitic infections of some important Red Sea fishes". Faculty of Veterinary Medicine. South Valley University

SCIENTIFIC REPORTS OF SCIENTIFIC PROJECTS

- 2009: Preparing the final report on "The coral reef transplantation using iron slugs as a substrate for fixation in the natural environment. By National Institute of Oceanography and Fisheries. Final Report No. (1): 21 Pp.
 - Mohammed, T. A. A.; Ezzel-Arab, M. A. H.; El-Saeyd, A. E. and El-Muselhy, K. M. (2009): The coral reef transplantation using iron slugs as a substrate for fixation in the natural environment. National Institute of Oceanography and Fisheries. Final Report No. (1): 21 Pp.
- 2011: Preparing the final report on "The coral reef transplantation At El Gouna using iron slugs as a substrate for fixation on it. By National Institute of Oceanography and Fisheries.
 - Mohammed, T. A. A.; El-Saeyd, A. E.; Ezzel-Arab, M. A. H. and El-Muselhy, K. M. (2011): Use of electric arc furnace slag (EAF-Slage) as a substrate for coral reef transplantation and fixation at El-Gouna. National Institute of Oceanography and Fisheries. Final Report No. (2): 35 Pp.

LIST OF PUBLICATION

- 1- Schroder, H. C.; Hassanein, H. M. A.; Lauenroth, S.; Koziol, C.; Mohammed, T. A. A. A.; Lacorn, M.; Steinhart, H.; Batel, R. and Muller, W. E. G. (1999): Induction of DNA Strand Breaks And Expression of HSP70 and GRP78 Homology by Cadmium in the Marine Sponge Suberites domuncula. Arch. Environm. Contam. Taxicol. 36, 47-55.
- 2- Rabie, S. A. and <u>Ahmed, T. A.</u> (2000):Light and Scanning electron microscope studies on some Trematode parasites infecting fishes from the Red Sea. *J. Egypt. Ger. Soc.* Zool. Vol. 33(D):163-182.
- 3- Rabie, S. A. and <u>Ahmed, T. A.</u> (2000): Redescription of five species of Trematodes (Digenea) infecting some fishes in the Red Sea. *J. Egypt. Ger. Soc. Zool.* Vol. 33(D):191-217.
- 4- Ammar, M. S. A.; <u>Mohammed, T. A. A</u>.; Mahmoud, M. A. (2005): Skeletal density (strength) of some corals in an actively flooding and a non flooding site, south Marsa Alam, Red Sea, Egypt. *J. Egyp. German Soci.* Zool. 1-15.
- 5- Mohammed, T. A. A. and Abd El-Wahab, M. (2005): Some Ecological Factors Affecting Coral Reef Assemblages Off Hurghada, Red Sea, Egypt. Egyptian Journal of Aquatic Research. Vol. 31 (1): 133-145.

- 6- Abd El-Wahab, M.; Dar, M. A. and Mohammad, T.A. (2005): Sediments, Coral Reefs and Seawater Interactions in Some Coastal Lagoons, Red Sea, Egypt. *Egyptian Journal of Aquatic Research*. Vol. 31 (SPECIAL ISSUE): 69-85.
- 7- Mohammed, T. A. A. (2006): Evaluation, distribution and the coral diversity in Some coastal lagoons, Red Sea, Egypt. *Egyptian Journal of Aquatic Research*. Vol. 32 (SPECIAL ISSUE): 180-195.
- 8- DAR, M. A. and Mohammed, T. A. A. (2006): Bio-Mineralization Processes and Heavy Metal Incorporations in the Scleractinian Coral Skeletons, Red Sea, Egypt. Egyptian Journal of Aquatic Research. Vol. 32 (SPECIAL ISSUE): 87-104.
- 9- Ahdy, H. H.; Mohammed, T. A. A. and Abdallah, A. M. A. (2006): Multi-elements content in marine algae from Egyptian Red Sea Coast. *Egyptian Journal of Aquatic Research*. Vol. 32 (2): 1-15.
- 10- Mohammed, T. A-A.; Kotb, M. M. A.; Ghobashy, A-F A.; El-Deek, M. S. (2007): Reproduction and growth rate of two scleractinian coral species in the northern Red Sea, Egypt. *Egyptian Journal of Aquatic Research*. Vol. 33 (2): 70-86.
- 11- Mohammed, T. A-A and Mohamed, M. Z. (2007): On Some Trematodes from Certain Coral Reef fishes off Hurghada, Red Sea, Egypt. *Afr. J. Biol. Sci.* Vol. 3 (2): 61-74.
- 12- Mohammed, T. A-A and Yassien M. H. (2008): Bivalve assemblages on living coral species in the Northern Red Sea, Egypt. *Journal of Shellfish Research*. Vol. 27 (5): 1217-1223.
- 13- DAR, M. A. and <u>Mohammed, T. A. A.</u> (2009): Seasonal variations in the skeletogensis process in some branching corals of the red sea. *Thalassas (An International Journal of Marine Sciences)*. Vol. 25 (1): 31-44
- 14- Mohammed, T. A.; Shoukr, F. A.; El-Komi, M. M.; Ezz El-Arab, M. A. H. (2009): Distribution and diversity of alcyonacean soft corals and scleractinian hard corals in the northern Red Sea, Egypt. *J. Egyp. German Soci. Zool.* Vol. 58D: 67-83.
- 15- Mohammed A. Seliem, Rabab Mohammed, Ahmed A. Hussein, Tarek A. A. Mohammed, Amira AboYousf and Mena M. Thabet (2009): Terpenoids from the Soft Coral Heteroxenia fuscescens from the Red Sea. "Ist Euro-Mediterranean conference: Plant natural products from biodiversity to bioindustry" 8-10 Dec. 2009.
- 16- Mohammed, T. A. A. and DAR, M. A. (2010): Ability of corals to accumulate heavy metals, Northern Red Sea, Egypt. *Journal*

- *of Environmental Earth Sciences*. Springer. DOI: 10.1007/s12665-009-0138-x. Vol. 59 (7): 1525-1534.
- 17- Mohammed, T. A. A. (2010) Quantitative assessment of coral reefs along the Egyptian Red Sea coast. *Journal of Egypt. Acad. Soc. Environ. Develop, (D-Environmental Studies).* 11 (2): 107-119.
- 19- Mohammed, T. A. A.; Hamed, A. A. A.; Habib, N. F. and El-Moselhy, K. M. (2010): Use of steel slag as a substrate for coral transplantation. *Egyptian Journal of Aquatic Research*, 36 (3): ----
- **20-** Mohammed, T. A. A.; Dar, M. A. and El-Saman M. I. (2010): Distribution patterns of hard and soft corals along the Egyptian Red Sea Coast. *Egyptian Journal of Aquatic Research*, 36 (4): ----