

Curriculum Vitae (C.V.)

Name: Mohammed Yusef Rasheed

Date of birthday: 1.11.1974

Place of birthday (city & country): Amman, Jordan

Nationality: Jordanian

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Mohammed Yusef Rasheed

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University studies (degrees):

- 1999 – 2002: Doctoral degree in Natural Sciences (Marine Biogeochemistry), grade “very good”, Max Planck Institute- University of Bremen, Germany. Title of thesis: ***“Organic matter degradation in coral reef carbonate and silicate sediments”***. Supervisors: Prof. Dr. Bo. Jorgensen, Prof. Markus Huettel.
- 1995 – 1998: Master degree of Science, Marine Analytical Chemistry, grade “*Excellent*”, Yarmouk University, Irbid, Jordan. Title of thesis: ***“Assessment of nutrient and chlorophyll a concentration gradient within a coral reef of the Gulf of Aqaba, Red Sea, Jordan”***. Supervisors: Prof. Dr. Fatma Al-Smadi, Dr. Mohammed Badran.
- 1991 – 1995: Bachelor degree of Science (B.Sc.) with a major in Chemistry and minor in inorganic chemistry received with the grade “*very good*”, Yarmouk University, Irbid, Jordan.

Employment History

- 2002-2007: Assistant Researcher-Marine Science Station, Jordan
- 2008-2010: Associate Researcher- Marine Science Station, Jordan
- 2009-2010: Marine environmental Scientist- Wood Hole Group Middle East, KSA (Sabbatical Leave)
- 2010-2013: Associate Professor-Coastal Environment Department-College of Marine Sciences- The university of Jordan-Aqaba Branch
- 2013-2014: Director of the Marine Science Station-Aqaba, Jordan
- 2014-2016: Full Professor-Coastal Environment Department- Faculty of Marine Sciences- The university of Jordan-Aqaba Branch
- 2016-Present: Full Professor-Chemistry Department- Faculty of Sciences- The university of Jordan-Amman.
- 2016-2017: Sabbatical leave in Mote Marine Laboratory; Florida-USA

Membership and Scholarships

- **2016-2017: Fulbright Scholarship- Mote Marine Laboratory; Florida-USA**
- 2007: Scholarships from DAAD for 3 month to conduct research at the Institut für Pharmazeutische Biologie und Biotechnologie-Duesseldorf-Germany.
- 2005: Scholarships from DAAD for 3 month to conduct research at the Max Planck Institute, Bremen-Germany.
- Member of the Jordan Environment Society (JES).
- Scholarship (1997-1998) from the Red sea Programme (RSP I) on Marine Sciences funded by the German Federal Ministry for education, Science and Technology (BMBF) through grant 03F0151A.
- Scholarship (1999-2000) from the Red sea Programme (RSP II) on Marine Sciences funded by the German Federal Ministry for education, Science and Technology (BMBF).
- Scholarship (2000-2002) from the DAAD, Germany.
- Scholarship (2005) from The DAAD, Germany

Research interest

Main interest is environmental marine Chemistry and analytical chemistry. Current research interests are in the fields:

- Environmental marine chemistry
- Pollution aspects of water.
- EIA studies.
- Marine Environmental Consultation
- Nutrient dynamics in coastal and offshore regions.
- Chemical Oceanography.
- Coral reef ecology, health and growth.
- Method of water analysis

Teaching Profile 2011-

Semester	Courses
First 2011-2012	Marine Chemistry Analytical Chemistry Analytical Chemistry lab
Second 2011-2012	General Chemistry (1) General Chemistry (2)
First 2012-2013	Marine Chemistry Analytical Chemistry Instrumental analysis
Second 2012-2013	General Chemistry (2) General Chemistry lab (1) Environmental Impact Assessment
First 2013-2014	Marine Chemistry Analytical Chemistry
Second 2013-2014	General Chemistry (2) Environmental Impact Assessment
First 2014-2015	Chemical Oceanography/Master Environmental Impact Assessment/ Master Instrumental analysis
Second 2014-2015	Environmental Impact Assessment Analytical Chemistry
First 2015-2016	Analytical Chemistry Instrumental analysis Marine Chemistry
Second 2015-2016	General Chemistry 2 Chemical Oceanography/Master Environmental Impact Assessment/ Master
2017-2023	General Chemistry 1 General Chemistry 2 Analytical Chemistry Instrumental Analysis Instrumental Analysis/Master

Research projects

- 2014-2016: Impact of anthropogenic activities on bathing water quality in tourist sites along the Jordanian Coast of the Aqaba Gulf. Funded by the University of Jordan.
- 2013-2015: Inclusive governance for sustainable Mediterranean coastal metropolis – MEDSEATIES. Funded project by ENPI-CBCMED (EU).
- 2013-2016: Risk assessment analysis on offshore platforms in Mediterranean (RAOP-MED). Funded project by ENPI-CBCMED (EU).
- 2012-2015: Managing the Environmental Sustainability of Ports for a durable development (MESP). Funded project by ENPI-CBCMED (EU).
- 2010-2011: Red Sea – Dead Sea water conveyance EIA study. Funded by World Bank.
- Ministry of Higher Education and Scientific Research 2010-2012: Sustainable and profitable aquaculture of giant clam (*Tridacna spp.*) in the Jordanian sector of the Gulf of Aqaba (Red Sea). 95,000 Jordanian Dinar.
- Nato 2008-2011: Monitoring of natural and anthropogenic aerosol pollution and its impact on ecosystems in the Gulf of Aqaba. 82,000 Euro
- Nato 2008-2011: Protection of the Gulf of Aqaba against anthropogenic stress during climate changes. 82,000 Euro
- National Monitoring Program of the Jordanian Coast of the Gulf of Aqaba
- Monitoring program for Industrial zone south of the Gulf of Aqaba
- Yarmouk University-Jordan: Degradation of labile and refractory material in the sediment.
- Jordan University-Jordan: Degradation of pesticides in carbonate sediments of the Gulf of Aqaba.
- 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.
- 2020-2022: BEst Rapid Environmental Assessment Decision sYstem (BE-READY). Funded project by Horizon 2020 - Research and Innovation Framework Programme

Field trips and seagoing expeditions

- January 1997 – August 1998: Applying many field surveys and studies at the northern Gulf of Aqaba concerning Marine Chemistry.
- March 1999 – April 1999: Biogeochemistry work on cruise M44/3, RV METEOR, Eastern Mediterranean – Gulf of Aqaba and northern Red Sea.
- January 2001: Field Work in Heron Island, Australia, organized by Brisbane University and Max Planck Institute.

Practical training and meetings attended

- Kick Off Meeting of Risk assessment analysis on offshore platforms in Mediterranean (RAOP-MED). Funded project by ENPI-CBCMED (EU), Lemesos, Cyprus, February 19-20, 2014.

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- Kick Off Meeting of Managing the Environmental Sustainability of Ports for a durable development (MESP), Genoa, Italy - July 17-19, 2012.
- The second meeting of the Managing the Environmental Sustainability of Ports for a durable development (MESP), Patras, Greece - April 22-23, 2013.
- The third meeting of the Managing the Environmental Sustainability of Ports for a durable development (MESP), La Spezia, Italy - December 10-12, 2013.
- The second meeting of Inclusive governance for sustainable Mediterranean coastal metropolis – MEDSEATIES. Funded project by ENPI-CBCMED (EU), Genoa, Italy, September 23-25, 2014.
- Aqaba International Conference on Marine and Coastal Environment, "Status and Challenges in the Arab World", Aqaba, Jordan, October 27-29, 2014.
- Kick off Meeting of the European Project ENPI CBCMED “ROPE MED”, Cyprus at the Limassol Port, **University of Genoa, Italy-July 17-19, 2014.**
- Regional Meeting on the coast and optimal use of resources of the sea - **Muscat - Oman, 5-7 / 12/2011**
- Kick off Meeting of the European Project ENPI CBCMED “MESP”, Genoa at the Faculty of Engineering, **University of Genoa, Italy-July 17-19, 2012.**
- 10/2007: International Conference on Rapid Urbanization and Land Use Conflicts in Coastal Cities, Aqaba- Jordan
- 5/2007: Advanced course in oceanography, Abdusssalm Institute for theoretical physics, Trieste, Italy
- 4/2007: Frontiers of Scientist in the Middle East, Seville Spain
- 1-5/10/2004: Frontiers of Scientist in the Middle East, Turkey Istanbul
- 17-22/A/2004: Fourth International Conference on Hazardous Material, United Nation University and Aqaba Special Zone Authority, Aqaba-Jordan.
- 15–17/December/2003: Workshop on Beach Replenishment, Aqaba Special Zone Authority, Aqaba-Jordan.
- June/2003: Workshop on Bathing Water Quality, World Health Organization & Aqaba Special Zone Authority, Aqaba-Jordan.
- 17-22/September/2001: Conference on Marine Science "A Marine Science Odyssey into the 21 st Century" organized by European Marine Biology Symposium (Menorka, Spain).
- January 2001: Workshop on Marine Science in Heron Island, Australia, organized by Brisbane University and Max Planck Institute.
- Septembr 1999: Conference on Marine Science. Proceedings of the Medcoast-Emecs Joint Conference. Antalya Turkey
- January 1999–July 2002: Biogeochemistry studies, Max Planck Institute (Scholarships from Red Sea Program and DAAD).
- March 1998: Third General Assembly of the Red Sea Programme (RSPI) in Max-Planck Institute for Marine Microbiology, Bremen, Germany.

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- July 1998: Diving course at Aqaba Marine Science Station (MSS) and the Royal Diving Center (RDC)/Jordan, with BSAC INTERNATIONAL NOVICE DIVER II certificate (equivalent to CMAS* star diver).
- 1995 – 1997: Research and teaching assistant at the department of Chemistry /Yarmouk University/Jordan during master study stages. The particular fields were General and Analytical Chemistry.

Consultancy and EIA studies

- **Marine Study for NEOM; 2022: Analysis and Evaluation of TOC, PAH's, PCB's, VOC's from different sites in the Gulf of Aqaba and Red Sea.**
- Sediment Core Collection for Phosphate, Polluted Soil Estimation and Benthic Habitat Survey at Aqaba Main Port. Environmental Baseline Study, Dar AlOmran, July 2017
- UNDP study: State of Coastal Environment Report for Aqaba for the project “Mainstreaming Marine Biodiversity Conservation into Coastal Zone Management in the Aqaba Special Economic Zone” 2015.
- Assessment of impact of LNG project on temperature and chlorine of the water of the Gulf of Aqaba 2013.
- Assessment Study of Nitrate discharge into seawater in the Red Sea prepared for MARAFIQ, Yanbu, Saudi Arabia 2009-2010. Served as Project Manager. In this project, the impacts of nitrate discharge from MARAFIQ treated wastewater on the Red Sea ambient water were studied to identify the risk to the marine ecosystem of the Red Sea.
- EIA study on Waste Treatment Plant in the northern and southern of Saudi Arabia prepared for HGBD Arabia, Al-riyad-Saudi Arabia 2009-2010. Served as Project Manager. In this project, EIA were prepared to study the impacts of Wastewater Treatment Plant for 9 sites in the Northern Boarder of KSA and 27 site in Al-Baha Region south of KSA.
- EIA study on Industrial discharge into seawater in the Red Sea prepared for Titanium Dioxide Plant (CRISTAL), Yanbu, Saudi Arabia 2009-2010. Served as Project Manager. In this project, the impacts of industrial discharge from Cristal on the Red Sea ambient water were studied to identify the risk to the marine ecosystem of the Red Sea.
- EIA study on Port development in the Arabian Gulf prepared for SCADO-ARAMCO, Saudi Arabia 2009. Served as Project Manager. Impact of port development in two areas; Manif and Dareen - Arabian Gulf coast on water quality and Arabian Gulf ecosystem were discussed.
- EIA study on fish and shrimp Hatchery in the Arabian Gulf prepared for SCADO-ARAMCO, Saudi Arabia 2009. Served as Project Manager. The impacts of fish and hatchery projects conducted in Abu Ali Island on marine environment of the Arabian Gulf were estimated.

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- 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, Higher Council for Science and Technology, Jordan, 2009-20011. Served as principle investigator.
- Coastal water characteristics, 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.
- Identifying the long-term Environmental Impacts of the Proposed Red Sea-Dead Sea Conduit (RDC), Prepared for Royal Scientific Society, November 2005.
- Geophysical survey in the northern tip of the Gulf of Aqaba (bathymetric – seabed sampling). Prepared for Ayla Oasis, June 2006.
- 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.
- EIA for Aqaba Port Relocation and Development Project prepared for Eco Consult
- Monitoring of natural and anthropogenic aerosol pollution and its impact on ecosystems in the Gulf of Aqaba. Protection of the Gulf of Aqaba against anthropogenic stress during climate changes.
- Environmental quality of the coastal water, bottom sediments prepared for Tala bay lagoon
- National Monitoring Program of the Jordanian Coast of the Gulf of Aqaba
- Monitoring program for Industrial zone south of the Gulf of Aqaba
- Monitoring program for the Container Port
- Monitoring of Royal Yacht Club in the Gulf of Aqaba

Professional experiences and skills

- Nutrient analysis in marine environment, spectrophotometer (seawater and sediments).
- Marine sediment analysis.
- Hydrocarbon and pigment analysis by fluorometer.
- Bacteria analysis by fluorescence microscope.
- Heavy metal analysis by Atomic Absorption

Miscellaneous

- Trilingual: Arabic, English and German.
- Driving license.
- Diving license.
- Computer skills in Microsoft Windows and Office with all applications and versions, Surfer, and some statistical programs.

Supervision on Master students

- Bashar Bataina, 2003-2004 " *Heavy metal accumulation in mussels along the Jordanian Coast of the Gulf of Aqaba*", Yarmouk Universit, Irbid- Jordan
- Taher Ababneh, 2003-2004 " *Temporal distributin of heavy metals in the mussel modiolus auriculatus at an industrial site on the Jordanian Coast of the Gulf of Aqaba; indicator of the seawater environmental quality*, Yarmouk Universit, Irbid- Jordan.
- Mohammed Al-Sayaheen, 2004-2005 " *Sequential extraction of heavy metals in the sediment of the Gulf of Aqaba*", Yarmouk Universit, Irbid- Jordan.
- Intisar Alhihi, 2005-2006 " *Source, Charectistics, and Environmental impact of sands for beach nourishment along the Jordanian shores of the Gulf of Aqaba*", Yarmouk Universit, Irbid- Jordan
- Mohammed Alamsri, " *Degradation of Pesticides in Carbonate Sediments of the Gulf of Aqaba*" 2006-2007, Jordan University, Amman-Jordan
- Mousa Al-Trabeen, 2005-2006 " *Heavy Metal Concentrations in Living and Non Living Components of Scleractinean Corals: Possible Index for Marine Pollution from the Northern Gulf of Aqaba, Jordan*". January 2006, Jordan University of Science and Technology, Irbid, Jordan.
- Mabrouk Al-Rouajfa, 2007-2008 " *Spatial distribution of raw phosphate dust along the Jordaian cost of the Gulf of Aqaba*.
- Zaid Al-Sejawi, 2011-2012: " *The effects of artificial feeds and nutrient supplements on the development of early stages of giant clam (*Tridacna spp.*)*"
- Khaldoon Al-Jazi, 2014-2015: *Assessment of polychlorinated biphenyls (PCBs) residues in seawater and marine sediments, in theGulf of Aqaba, Jordan*
- Roba Al-Smadi, 2014-2015: *Impact of anthropogenic activities on bathing water quality in tourist sites along the Jordanian Coast of the Aqaba Gulf.*
- Qusai Yanes, 2015: *Assessment of Polychlorinated Dibenzodioxin and Polychlorinated Dibenzofuran (PCDD/Fs) levels in beach sand and marine sediment of the Jordanian coast of the Gulf of Aqaba .*
- Mosa Al-Badaina, 2015-2016: *Impacts of cooling water discharge on temperature and chlorine of the water of the Gulf of Aqaba Jordan.*
- Rida Al-Btoosh, 2015-2016: *Present and Future Maritime Transport in the Gulf of Aqaba Jordan, A Scenario for Maritime Spatial Planning in the Aqaba Special Economic Zone (ASEZ) Until 2030.*
- Eshraq Al-Jamal, 2019-2021: *Assessment of Heavy Metals Contamination in Seawater and their Adsorption onto Natural Sediments from the Gulf of Aqaba- Jordan.*
- Ahmad Zakarya, 2020-2021. *Assessment of Hydrocarbon (HC) levels in sediments from the Gulf of Aqaba-Jordan and Tripoli Port-Lebanon.*
- Rawan Alfaqeer, 2020-2021. *Development of New HPLC Method for Analyzing Drugs Used in H-Pylori Treatment*

Publications

Rawajfih M, Rasheed M, Al-Rousan S, Manasrah R, Abu-Hilal A. (2024). Transportation, accumulation and pollution by lost raw phosphate dust particles from a Phosphate Loading Berth in coastal water of the Gulf of Aqaba-Red Sea. *Jordan Journal of Environmental Sciences*.

Rasheed M, Al-Rousan S, Manasrah R. (2022). Estimation of the total inorganic phosphate-phosphorus in sediments of the old phosphate port at Jordan's Gulf of Aqaba. *Jordan Journal of Chemistry*. <https://doi.org/10.47014/17.2.3>

Zakaria A, Al Bakain, R., **Rasheed M.**, El-Hoz M. (2022). Assessment and geographical prediction of sediments origin based on hydrocarbons content: application to the Gulf of Aqaba and Port of Tripoli. *International Journal of Environmental Analytical Chemistry*
<https://doi.org/10.1080/03067319.2022.2104640>.

Aljamal E., **Rasheed M.**, Khalili F., (2022). Adsorption of Cd(II), Pb(II) and Ni(II) onto natural sediments from the Gulf of Aqaba Jordan. *International Journal of Environmental Analytical Chemistry*. <https://doi.org/10.1080/03067319.2022.2032008>

Al-Tarabeen, M., El-Neketi, M., Albohy, A., Muller, W., **Rasheed, M.**, Ebrahim, W., Proksch, P., Ebada, S. (2021). Isolation and Molecular Docking of Cytotoxic Secondary Metabolites from Two Red Sea Sponges of the Genus *Diacarnus*. *Chemistry Select*. 6: (217-220)

Al-Tarabeen, M. El-Rjoob, A. Tahboub, Y. **Rasheed, M.** (2021). Monitoring of Selected Banned Azo Dyes in Edible Oils by High-Performance Liquid Chromatography-Photodiode Array Detector. *Food Analytical Methods*. 14 (2478-2485)

Al Faqeer, R., Al Bakain, R., **Rasheed, M.**, Makahleh, A. (2021). Development of Novel HPLC Method for Analysing Drugs Used in H-Pylori Treatment. *Jordan Journal of Pharmaceutical Sciences*. 14 (4):473-486.

Al Hseinat, M., **Rasheed, M.**, Al-Rousan, S. (2020). Long-term quality record (1996-2018) of coastal sediments at the complex industrial site along the Jordanian coast of the Gulf of Aqaba. *Environmental Monitoring and Assessment*. 192:(1573-2959).

Alrowwad, A., Al Sawalmih, A., Manasrah, R., **Rasheed, M.**, Kteifan, M., Soleiman, A., Arabeyyat, Z., Al-Saad, A., Barnett, S. (2020). Practices of Coastal Zone Management of the Jordanian Gulf of Aqaba by Mapping Spatial Convergence of Seafront Human Activities and Their Potential Impact on the Marine Environment. *Fresenius Environmental Bulletin*. 29: 3240-3253

Manasrah, R., Al-Badaineh, M., **Rasheed, M.**, Dixon, L. (2019). Temperature dispersion of cooling water discharge into oligotrophic water. *Fresenius Environmental Bulletin*; 28(5):4380 – 4391.

Bawana M, Yanes Q, **Rasheed M** (2019). GC determination of the levels of Polychlorinated Biphenyls (PCBs) in Seawater and Sediment in the Gulf of Aqaba. *Acta Chromatographica*. 32(2): 1-5.

Manasrah, R., Abu Hilal, A., **Rasheed, M.** “Physical and chemical properties of the seawater in the Gulf of Aqaba and Red Sea” Chapter 3. In: *Oceanography and biological aspect of the Red Sea*. Edited by Najeeb M. A. Rasul, Ian C. F. Stewart, Peter Vine, Zohair A. Nawab, **2019**. Springer.

Rasheed M, Manasrah R, Al-trabeen K, Kellie Dixon L. (2018). Impact of artificial lagoons on seawater quality: evidence from 7 years of physicochemical seawater monitoring. *Eviron. Monit. Assess.* 190:244. **ISI**

- Rasheed M, Manasrah R, Al-trabeen K, Kellie Dixon L. (2018). Impact of artificial lagoons on seawater quality: evidence from 7 years of physicochemical seawater monitoring. *Eviron. Monit. Assess.* 190:244. **ISI**
- Yanes Q, **Rasheed M.** (2017). GC-Mass determination of low levels Polychlorinated Dibenzodioxin and Polychlorinated Dibenzofuran (PCDD/Fs) in Beach Sand and Marine Sediment of the Gulf of Aqaba. *Acta Chromatographica.* _ **ISI**
<http://akademai.com/doi/pdf/10.1556/1326.2017.00238>
- Schenone C., Brunenghi M., Pittaluga I., Hajar A., Kamali W., Montaresi F., **Rasheed M.**, Abdul Wahab A., Moghrabi Y., Manasrah R., Merhaby D. and Montani L. (2017). Managing European Cross Border Cooperation Projects on Sustainability: A Focus on MESP Project. *Sustainability*, 9 (112): 1-18. _ **ISI**
- Al-Momani R., **Rasheed M.** (2016). Treated wastewater uses in irrigation conserve water in the world's second water-poorest country, Jordan. *Fres. Environ. Bull.* 25(6):2225-2231. _ **ISI**
- UNDP (2015). *State of the Coastal Environment, Report for Aqaba*, Gulf of Aqaba, Red Sea, ASEZA, Aqaba, Jordan.
- AlTarabeen M, Aly A, Hemphill C, **Rasheed M.** Proksch P. (2015). New nitrogenous compounds from a Red Sea sponge from the Gulf of Aqaba. *Zeitschrift für Naturforschung C*, 70 (3-4): 75-80. _ **ISI**
- Rasheed M**, Al-Trabeen K, Badran, M (2012). Long-term water quality monitoring at an industrial site on the Northern Gulf of Aqaba, Red Sea. *Mediterranean Marine Science*, 13: 250-258. _ **ISI**
- Rasheed M**, Mian S, Aubrey D (2011). Guidelines for EIA of fish and shrimp hatcheries in a semi-enclosed water body. *Ocean and Coastal Management*, 54: 678-686. _ **ISI**
- 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*. 3:344-350.
- Schöttner, S., B. Pfitzner, S. Grünke, **M. Rasheed**, C. Wild und A Ramette (2011). Drivers of bacterial diversity dynamics in permeable carbonate and silicate coral reef sands from the Red Sea. *Environmental Microbiology*, 13: 1815-1828. _ **ISI**
- Rasheed M**, Al Najjar T, Al Masri M, Mian S (2011). Experimental degradation of oil in permeable sediments from the Gulf of Aqaba, Red Sea. *Chemistry and Ecology*, 27: 287-295. _ **ISI**
- Al-Najjar1 T, **Rasheed M**, Ababneh Z, Ababneh A, Al-Omarey H. Heavy metals pollution in sediment cores from the Gulf of Aqaba, Red Sea. *Natural Science*. 3:7775-782.
- Ababneh Z., Al-Omari, H., **Rasheed M**, Al Najjar T, Ababneh A (2010). Assessment of gamma-emitting radionuclides in sediment cores from the Gulf of Aqaba, Red Sea. *Radiat Prot Dosimetry*. 141(3):289-98. _ **ISI**
- Jantzen C, Wild C, **Rasheed M**, El-Zibdah M and Richter C. (2010). Enhanced pore-water nutrient fluxes by the upside-down jellyfish *Cassiopea* sp. In a Red Sea coral reef. *Mar. Ecol. Prog. Ser.* 411: 117-125. _ **ISI**

- Al-Masri M, Alawi M, **Rasheed M** (2009). Degradation of Organochlorine pesticides in carbonate sediments from the Gulf of Aqaba. *Res. J. Env. Toxicology*, 3:147-158.
- Abu Hilal A, **Rasheed M**, Al Hihi Al- Rousan S (2009). Characteristics and potential environmental impacts of sand material from sand dunes and uplifted marine terraces as potential borrow sites for beach nourishment along the Jordanian coast of the Gulf of Aqaba. *Journal of coastal conservation*, 13:274-261. _ ISI
- Rasheed M**, Al Hihi E, Al- Rousan S, Abu-Hilal A (2009). Chemical evaluation of sand material sources for beach replenishment along the coast of the Gulf of Aqaba, Red Sea. *Chemistry and Ecology*, 25:371-384. _ ISI
- Wild C, Naumann M, Haas A, Struck U, Mayer F, **Rasheed M**, Huettel M (2009). Coral sand O₂ uptake and pelagic-benthic coupling in a subtropical fringing reef, Aqaba, Red Sea. *Aquatic Bio.* 6:133-142. _ ISI
- Al-Shwafi N, Al-trabeen K, **Rasheed M** (2009). Organochlorine Pesticides And Polychlorinated Biphenyls Carcinogens Residual In Some Fish and Shell Fish Of Yemen. *Jordan Journal of Biological Sciences*, 2:23-28.
- Abu-Hilal A, **Rasheed M**, Al-Najjar T (2008). Potential environmental impact of dissolution of raw phosphate in sea water of the Gulf of Aqaba. *Chemistry and Ecology*.24:51-59. _ ISI
- Cornils A., Schnack-Schiel SB, Al-Najjar T, Badran MI, Manasreh R, **Rasheed M**, Richter C (2007). The seasonal cycle of the epipelagic mesozooplankton in the northern Gulf of Aqaba (Red Sea). *Journal of Marine Systems*, 68: 278-292 _ ISI
- Alawi M, **Rasheed M**, Al-Masri M (2007). Organochlorine pesticides in sea water and sediment samples from the Aqaba Gulf. *Fres. Environ. Bull.* _ ISI
- Rasheed M**, Wild C, Jantzen C and Badran M (2006). Mineralization of particulate organic matter derived from coral-reef organisms in reef sediments of the Gulf of Aqaba. *Chemistry & Ecology*, 22: 13-20. _ ISI
- Rasheed M**, Al-Rousan S, Manasrah R and Al-Horani F (2006). Nutrient Fluxes from Deep Sediment Support Nutrient Budget in the Oligotrophic Waters of the Gulf of Aqaba. *Journal of Oceanography*, 62: 83-89. _ ISI
- Badran M, Manasrah R, **Rasheed M** (2006) Sea-water seasonal changes at a heavy tourism investment site on the Jordanian northern coast of the Gulf of Aqaba, Red Sea. *Chemistry and Ecology*, 22: 425-435. _ ISI
- Al-Rousan S, **Rasheed M**, Manasrah R and Al-Horani F (2006) Geochemical and textural properties of carbonate and terrigenous sediments along the Jordanian coast of the Gulf of Aqaba. *Journal of Oceanography*, 62: 839-849. _ ISI
- Manasrah R, **Rasheed M**, Badran M (2006) Relationship between water temperature, nutrients and dissolved oxygen in the northern Gulf of Aqaba, Red Sea. *Oceanologia*, 48: 237-253. _ ISI
- Manasrah R, Al-Horani F, **Rasheed M**, Al-Rousan S, and Khalaf M (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. _ ISI

- Al-Rousan S, **Rasheed M**, Khalaf M and Badran M (2005). Ecological and geochemical characteristics of bottom habitats at the northern Jordanian coast of the Gulf of Aqaba. *Chemistry & Ecology*, 21: 227-239. _ ISI
- Al-Najjar T, **Rasheed M**. (2005). Zooplankton biomass in the most northern tip of the Gulf of Aqaba, a case study. *Lebanese Science Journal*. **6:3-10**.
- Al-Najjar T, **Rasheed M**. (2005). Annual cycle of phytoplankton community structure in the Gulf of Aqaba detected by HPLC analysis of pigment. *Dirasat*, 32: 195-202.
- Al-Horani F, Al-Rousan S, Manasrah R and **Rasheed M** (2005). Coral calcification: Use of radioactive isotope and metabolic inhibitors to study the interactions with photosynthesis and respiration. *Chemistry and Ecology*. 21: 25-335. _ ISI
- Wild C, **Rasheed M**, Jantzen C, Kremb S, Cook P, Struck U, Huettel M, Boitius A (2005) Benthic metabolism and degradation of natural particulate organic matter in carbonate and silicate reef sands of the northern Red Sea. *Marine Ecology Progress Series* 298:69-78. _ ISI
- Rasheed M**, Al-Rousan S, Badran M (2005) Phosphate enrichment in the northern Gulf of Aqaba: Regulation by carbonate sediment and impact on nitrogen elevation. *Chemistry & Ecology*, 21: 199-208. _ ISI
- Badran M, **Rasheed M**, Manasrah R and Al Najjar T (2005). Nutrient flux, fuel of the summer primary productivity in the oligotrophic waters of the Gulf of Aqaba, Red Sea. *Oceanologia*. 47: 47-60. _ ISI
- Rasheed M**, Al-Rousan S, Badran M (2004) Quality of bottom surface sediments at an industrial site on the southern coast of the Gulf of Aqaba, Jordan. *Mu'tab Lel-Bubuth wad-Dirasat*. 19: 99-115.
- Al-Rousan S, **Rasheed M**, Badran M (2004) Nutrient regeneration from sediments and interstitial waters from the northern Gulf of Aqaba. *Scientia Marina*, 68: 483-490 _ ISI
- Rasheed M** (2004) Nutrient Fluxes from sediments of the northern Gulf of Aqaba under various anthropogenic activities. *Lebanese Science Journal*. 5:3-16.
- Wild C, Huettel M, Klueter, Kremb SG, **Rasheed M** Jørgensen B (2004) Coral mucus functions as an energy carrier and particle trap in the reef ecosystem *Nature*. 428:66-70. _ ISI
- Wild C, **Rasheed M**, Werner U, Franke U, Johnstone R, Huettel M (2004) Degradation and mineralization of coral mucus in reef environments. *Marine Ecology Progress Series* 267:159-171 _ ISI
- Rasheed M.**, Wild C., Franke U. & Huettel M. (2004) Benthic photosynthesis and oxygen consumption in permeable carbonate sediments at Heron Island, Great Barrier Reef, Australia. *Estuarine, Coastal and shelf Science* 59:139-150 _ ISI
- Rasheed M**, Badran MI & Huettel M (2003) Influence of sediment permeability and mineral composition on organic matter degradation in three sediments from the Gulf of Aqaba, Red Sea. *Estuarine, Coastal and shelf Science* 57:369-384 _ ISI
- Rasheed M**, Badran M & Huettel M (2003) Particulate matter filtration and seasonal nutrient dynamics in permeable carbonate and silicate sands of the Gulf of Aqaba, Red Sea. *Coral Reefs* 22:167-177 _ ISI

Rasheed M, Badran M., Richter C. and Huettel, M (2002). Effect of reef framework and bottom sediment on nutrient enrichment in a coral reef of the Gulf of Aqaba. *Marine Ecology Progress Series* 239: 277-285 _ **ISI**

Rasheed M (2002) Organic matter degradation in coral reef carbonate and silicate sediments. PhD. Thesis, Max Plank Institute Bremen University, Bremen-Germany

Richter C, Wunsch M, **Rasheed M**, Kötter I and Badran M (2001). Endoscopic exploration of Red Sea coral reefs reveals dense populations of cavity-dwelling sponges. *Nature* 413, 2001 _ **ISI**

Badran M, **Rasheed M**, Richter C, Abu Hilal A, Smadi F, and Hempel G. (1999). Nutrient enrichment of coral reef waters in the Gulf of Aqaba. Red Sea Proceedings of the Medcoast-Emecs Joint Conference. Antalya Turkey

Rasheed M (1998) Assessment of trace nutrient and chlorophyll a concentration gradients in a coral reef of the Gulf of Aqaba, Red Sea. Master Thesis, Yarmouk University, Irbid-Jordan.

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