

CURRICULUM VITAE

Dr. Marwan GHANEM

(Associate Prof., Ph.D. in Hydrogeology, Hydrology, Hydrochemistry, Water Resources Management, Groundwater modeling & environmental pollution, Environmental Assessment, from Technische Universitaet Bergakademie Freiberg – LS fuer Hydrogeologie, Freiberg, Germany)

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Specified Key-words:

Water Resources management, Environmental Impact Assessments, Hydrogeology, Hydrology, Hydrochemistry, Isotopes, Geology, Geochemistry, Water Balance, GIS - Hydrology, Groundwater Modeling, Quality of Ground - and Surface water, Environmental Sciences, and Solid Waste Pollution.

PERSONAL DATA

Birth Date	: 3rd April 1965
Place of Birth	: Dier Bize - Ramallah
Sex	: Male
Nationality	: Palestinian / West Bank
Marital Status	: Married
No. of Children	: Six (four sons and two daughters)

EDUCATION

- 1977 Elementary School Certificate, Dier Bize, Ramallah
1980 Preparatory School Certificate, Kufer Nima, Ramallah
1983 Secondary School Certificate, The Catholic School of our lady annunciation, Ramallah (82% average).
1986 B.Sc. in Geology, Yarmouk University, Irbid - Jordan (74.4 % average).
1990 M.Sc. in Geology and Geochemistry (88.3 % average).
Department of Earth and Environmental Sciences /Yarmouk University - Jordan.

1999 Ph.D in Hydrogeology, hydrochemistry (Water Resources Management) at the hydrogeological department of the institute of Geology at the TU Bergakademie Freiberg/ Institut fuer Hydrogeologie – Geologie in Freiberg, Sachsen – Germany (1995- 1999).

MASTER THESIS TOPIC

Petrogenesis of Quaternary Basalts in the Central Part of the Jordan Rift Valley and Some Areas in the North West Jordan.

Ph.D. THESIS TOPIC

Hydrogeology and Hydrochemistry of Faria drainage Basin / West Bank

(The Ph.D study in Germany was financially supported from the Deutscher Akademischer Austauschdienst (DAAD) / Bonn / Germany).

LIST OF PUBLICATIONS

In Press

- **Marwan Ghanem**, Waseem Ahmad, Yacoub Keilani and Farah Sawaftah, Holger Schuettrumpf, 2019. Groundwater Quality Interaction Assessment of Spring's Water in Central Catchments of West Bank/Palestine. **Springer Journal of Environmental Monitoring and Assessment**.

International Journals (Referred Journals)

- **Ghanem, M.**, Jebreen, H., Sege, J. and Rubin Y., (2018). Impacts of Spring Water Quality Using a Web-Based on the Environmental Management System of Western

Ramallah / Palestine. **Euro-Mediterranean Journal for Environmental Integration.(Springer)** (2019) 4: 2. <https://doi.org/10.1007/s41207-018-0091-8>.

- Shawkat Naser and **Marwan Ghanem**, 2018. Environmental and Socio- Economic Impact of Wastewater in Wadi- Qana Drainage Basin- Salfeet- Palestine. **Journal of Geographical Research**.

- Hassan Jebreen , Andre Banning , Stefan Wohnlich , Andrea Niedermayr , **Marwan Ghanem** and Frank Wisotzky (2018). The Influence of Karst Aquifer Mineralogy and Geochemistry on Groundwater Characteristics: West Bank, Palestine. **Water Journal**, Water 2018, 10, 1829; doi:10.3390/w10121829.

- Jon Sege, **Marwan Ghanem**, Waseem Ahmad, Hanadi Bader, Yoram Rubin (2018). Distributed data collection and web-based integration for more efficient and informative groundwater pollution risk assessment. **Elsevier - Environmental Modelling & Software Journal**, 100 (2018): 278 - 290.

- **Ghanem Marwan**, Tamimi A, Ali Zakariya (2017). Flooding Protection Management for Risk Prevention in Arid Catchments. *International Journal of Hydrology* 1(4): 00022. DOI: 10.15406/ijh.2017.01. 00022.

- **Ghanem Marwan**, Dare A, Jebreen H (2017). Environmental spring water qualitative assessment in Natuf catchment - West Bank. **Academia Journal of Environmental Science**. 5(10): 174-183.

- Jebreen H., Wohnlich S., Wisotzky F., Banning A., Niedermayr A., **Marwan Ghanem** (2017). Recharge estimation in semi-arid karst catchments: Central West Bank, Palestine. **Springer -Grundwasser Journal**, <https://doi.org/10.1007/s00767-017-0376-x>, Springer Berlin Heidelberg.

- **Marwan Ghanem**, Waseem Ahmad, Yacoub Keilan and Farah Sawaftah (2017). Groundwater vulnerability mapping assessment of central West Bank catchments using PI method. **Environ Earth Sciences** (2017) 76:347.

Marwan Ghanem, Waseem Ahmad, Farah Sawaftah and Yacoub Keilan (2017). Socio - Economic - Environmental Impact on Spring water in Western Ramallah Catchments. **CJMES** 2:77-.92 doi.

- Thaher Dalal, **Marwan Ghanem** and Smidt Ebel (2017). Inventory of the potential artificial recharge practice in the Eastern Aquifer basin: the case of Al-Qilt catchment, Palestine. **Int. J. Global Environmental Issues**, Vol. 16, Nos. 1/2/3, pp.45–61.

- Tiehatten, B., Assaf, K., **Marwan Ghanem**, Jayyousi, A., Marei, A., Mostert, E., Shaded, S., Schoups, G., Smidt, E. and Zayed, O. (2017) ‘Evaluation of water harvesting and managed aquifer recharge potential in Upper Fara’ basin in Palestine: comparing

MYWAS and water productivity approaches', **Int. J. Global Environmental Issues**, Vol. 16, Nos. 1/2/3, pp.29–44.

- **Marwan Ghanem**, Hassan Jebreen & Jens Lange (2016). Qualitative spring water management in the central western catchment of the West Bank from hydrochemical and environmental isotopes approaches. **Arabian Journal of Geosciences (Springer)**, Volume 9, pp.283, DOI 10.1007/s12517-016-2304-2

- Mahmoud Hammad & **Marwan Ghanem** (2016). Feasibility of Protection Zones for Water Resources in arid areas: Case Study; EIN Sultan spring - Jericho, Palestine. **IJISSET - International Journal of Innovative Science, Engineering & Technology**. Vol. 3 Issue 2, pp 64 - 78, ISSN 2348 – 7968.

- Wasim Ahmad & **Marwan Ghanem** (2016). Enhancing of Socio - Economical - Environmental Impact of the Wastewater Flow in Communal level. **International Journal of Research In Social Sciences** , Vol. 6, No.2, pp 46 - 52. ISSN 2307-227X.

- **Marwan Ghanem** & Mahmoud Hammad (2015). Feasibility of Protection Zones for Water Resources in Arid Areas: Case Study; Duyuk - Nueimah - Shosa Springs, Jericho, Palestine. **Journal of Environmental Protection**, Volume 6, pp 110 -117.

- Hassan Jebreen, **Marwan Ghanem** (2015). Spring Water Qualitative Assessment in Mountainous Areas, Case Study: Soreq Catchment/Ramallah/West Bank. **Journal of Water Resource and Protection**, Volume 7, pp851-859. <http://dx.doi.org/10.4236/jwarp.2015.711069>

- Khalil Abu Alan & **Marwan Ghanem** (2014). Environmental Study of Spring Water Quality in the Zarqa Natural Reserve - West Ramallah/ Palestine. **Rev. Microbiol. Ind. San et Environm.** Vol. 8, No. 2, pp 208 - 220.

- **Marwan Ghanem** and Wasim Ahmad (2014). The Environmental Effect of the Spring Water in Matwi Catchment/ Palestine. **Moroccan Journal of Chemistry**, Volume 2, No. 5, pp 443-446.

- **Marwan Ghanem** (2014). Hydrochemical Characteristics of the Runoff in the Anata Catchment , **Journal of Hydrocarbon Mines Environmental Research**, volume 3, issue 2, PP 83-90.
- **Marwan Ghanem**, Lübbecke S., and Schweder C.(2013). Potentiality of the community Willingness for using desalination plants for the groundwater wells in Jericho Area – Palestine, **International Journal of Management & Information Technology**, Volume 5, No. 1, P: 411-416. ISSN 2278-5612.
- Bihan Bader and **Marwan Ghanem** (2013). The Socio – Economic Impact for the Spring Water Use in Natuv Catchment/ Ramallah West – Palestine, **International Journal of Humanities and Social Science**, Vol. 3 No. 6 , P:69 – 72.

- **Marwan Ghanem** and Bihan Bader (2013). Pollution Sources Determination of the East – West Profile of the spring system / Ramallah West, Palestine, **European International Journal of Science and Technology**, ISS_: 2304-9693, P:226 - 231.
- **Marwan Ghanem** and Sawsan Asbah (2013). Monthly Recharge Estimation for the Auja – Tamseeh catchment of the Western Basin Aquifers – System, Palestine, **International Journal of Engineering and Applied Sciences**, Vol. 3, No. 4, P: 44-50, ISSN2305-8269.
- Samhan S., Friese K., Wolf von Tuempling, Poellmann H., Hoetzl H. and **Marwan Ghanem** (2013). Anthropogenic influence of trace metals in sediments of the Al-Qilt catchment, West Bank, Palestine: 1. Contamination factor and bonding forms. **Environmental Earth Sciences**, DOI 10.1007/s12665-013-2559-9.
- Tiehm A., Schmidt N., Lipp P., Zawadsky C., Marei A., Seder N., **Marwan Ghanem**, Paris S., Zeman M., Wolf L. (2012). Consideration of emerging pollutants in groundwater-based reuse concepts, **Water Science & Technology** 66(6):1270-6, DOI: 10.2166/wst.2012.290 .
- **Marwan Ghanem** (2012). Socio-economical and environmental Impact for the agricultural use of Wastewater in the Wadi Nar catchment/ Dead Sea Region, **International Journal of Humanities and Social sciences**, Vol. 2 No. 22.
- **Marwan Ghanem** and Nizar Samhan (2012). Groundwater Pollution Assessment in Tulkarem area, Palestine, **Journal of Earth sciences and Geotechnical Engineering**, Volume 2, No. 1, P 1- 16, ISSN: 1792-9040, International scientific Press.
- Nizar Samhan and **Marwan Ghanem** (2012). Ground water Assessment for NW of Auja Tamaseeh Basin in Tulkarem Area, West Bank, **Journal of water resources and protection**, volume 4, pages 407 – 413.
- **Marwan Ghanem**, Marei A., Hoetzl H., Wolf L., Ali W., Assi A., (2011). Assessment of Artificial Recharge Test in Jeftlik – Faria Area, West Bank. **Journal of Water Resource and Protection**, 2011, 3, 186-191, Doi: 10.4236/jwarp.2011.33024.
- Samhan S., Friese K., Wolf von Tuempling and **Marwan Ghanem** (2011). Anthropogenic trace metals and their enrichment factors in Wadi Al-Qilt sediment, Palestine. **International Journal of Environmental Studies** 68(4):495-507 · DOI: 10.1080/00207233.2011.583042.
- **Marwan Ghanem**, Samhan S., Carlier E & Ali. W. (2011). Groundwater Pollution Due to Pesticides and Heavy Metals in North West Bank, **Journal of Environmental Protection**, volume 2. No.4, PP.429-434.

- Samhan S., **Ghanem Marwan** and Carleir E. (2011). Water harvesting is a feasible option to optimize water shortage a case of Ein Qinia village, West Bank, **Jericho Journal for Security and International Studies**. Issue (2) autumn volume 1, P43 - 55.
- Sughair R. and **Ghanem M.** (2011). The Apartheid wall and its impact on the social, environ – water tissues in the north Jerusalem, **Jericho Journal for Security and International Studies**. Issue (2) Autumn volume 1, P87 – 101.
- Rimawi H, **Marwan Ghanem** and Shalash I. (2010). Rainfall Trends in the District of Ramallah and Al-Bireh, Palestine, **Journal of Water Resource and Protection (JWARP)**, Volume 2, P345 – 352.
- **Marwan Ghanem &** Ghannam S. (2010). Spring Water Hydrochemistry along The North - South Profile in the Jordan Valley, **Asian Journal of Earth Sciences**, Volume 3, No. 6, P122 – 129.
- **Marwan Ghanem**, Shalash I. & Rimawi H. (2010). Hydrochemical Characteristics of Rainwater in Ramallah District, **Asian Journal of Earth Sciences**, Volume 3, No.1, P 11 – 15.
- R. Isayed, **Marwan Ghanem** & M. Abu Madi (2010). Willingness to Use Treated Wastewater and to Pay for its Irrigated Products in Dura – Hebron, **Drop Journal of the University of Bir Zeit – Water Institute Journal**, Volume 6, P 101 – 112, Bir Zeit University, Palestine.
- Wolf L., Vertz H., Hoetzl H., **Marwan Ghanem** (2010). Exploring the potential of managed aquifer recharge to mitigate water scarcity in the lower Jordan River basin within within IWRM approach. **ISMAR6** Proceeding.
- Shalash I. & **Ghanem M.** (2007). Hydrochemistry of Natuf Drainage basin in Ramallah area / West Bank, **Environmental Geology Journal**, Volume 55, No.4, P359 – 367.
- **Marwan Ghanem**, Abu Ziad N., Abu Saada M. and Ali W. (2007). Using Groundwater flow model of the potentiality of the Sustainable Aquifer Management: Case Study (Bethlehem area)/ Wet Bank , **Arab Water Council Journal**, Volume 1, No:1, p 32 - 41, Cairo.
- Khyat S., Geyer S., Hoetzl H., **Marwan Ghanem &**Ali W. (2006). Identification of Nitrate Sources in Groundwater by 15 Nitrate and Oxygen 18 Isotope: A study of the shallow Pleistocene Aquifer in the Jericho area, Palestine. **Acta Hydrochimical and Biological Journal**, Volume 34, P 27 - 33.
- Lange J., Greenbaum N., Husary S., **Ghanem M.**, Leibundgut, Ch., Schick, A. P. (2003). Runoff generation from successive simulated rainfalls on a rocky, semi-arid, Mediterranean hillslope. **Hydrological Processes**, 2003; 17 (2) : 279-296.

- **Marwan Ghanem** and Merkel B. (2002). Hydrogeology and hydrochemistry of the Faria basin, northeastern West Bank , **Freiberger Forschungsheft International Journal**, Volume 1, P125 – 136, Elsevier , C494, ISBN 3-86012-162 -6. Freiberg / Sachs.
- **Marwan Ghanem (2000)**. Isotopic Investigation of Deuterium, Oxygen-18 and Tritium of the Faria basin / West Bank: Paper in **the Journal Water and Environment**, PHG , in Jerusalem.
- **Marwan Ghanem (2002)**. General impressions about environmental pollution in the West bank and Gaza (**Book**).
- **Marwan Ghanem (2004)**. The traditional water usage in Palestinian cultural communities, **Water Arab and Technology**, Tunis, UNESCO.

Reviewer for the Journals of:

- Contaminant Hydrology
- Journal of Hydrology
- Hydrogeology Journal
- Environmental Earth Sciences
- Environmental Science and Pollution Research
- Water Research
- Sindh University Research Journal
- Environmental Monitoring and Assessment
- Science Domain international
- Journal of the Association of Arab Universities for Basic and Applied Sciences
- Journal of Geographical Research.
- Arab Journal of Basic and Applied Sciences

International Conferences (With reviewed Papers in the Conference Proceedings)

- 2ND
- AGIC2019 APPLIED GEOSCIENCES FOR GROUNDWATER – 2nd Atlas Georesources International Congress, 28-30 March 2019 in Hammamat, Tunis.
- Workshop “Water-Energy-Food Nexus implementation in the Middle East”, Sep. 2018, Lebanon.
- 1St Mediterranean Conference for Environmental Integration, 22-25 Nov., 2017, Tunis
- Climate Change Justice conference, Tokyo, Japan, 1- 6 August 2016.
- RUW Conference on Women and Society, Kingdom of Bahrain, 19-20 April, 2016.

- PADUCO: Palestinian-Dutch Academic Cooperation Program on Water Second Conference, 28-30 October 2015, The Hague, The Netherlands.
- Gender Dimension of the Water-Energy-Food Nexus in the Middle East and North Africa Region. University of Twente, Enschede, The Netherlands, 4th of Nov. 2015.
- PADUCO workshop on Artificial Recharge. Delft, Netherlands, 26- 27 Oct. 2015
- Dresden Nexus Conference, DNC 2015 Global change 24 - 28 March 2015 Dresden , Germany.
- Karst Water Resources in the Middle East, Ankara – Turkey, 27 - 29 May 2014.
- International Congress on Substances Natural's & Modelisation. University Sidi Mohamad, Fb Taza, Morocco, 15 - 16 Dec. 2014.
- The 4th International Congress Water, Waste & Environment (EDE4), Agadir, Morocco, December 18-20, 2013.
- IBIO, 6th World Congress of Industrial Biotechnology (ibio-2013), April 25-27, 2013 in Nanjing, China.
- REZAS12 Colloquium: "Water resources in the arid and semi-arid regions. Challenges and prospects. Case of the African continent", Bani Melal, Morocco, November, 2012.
- Minia International Conference for Agriculture and Irrigation in the Nile Basin Countries, El Minia – Egypt, March 2012.
- Professional Environmental Education for Sustainable Development conference: Plugging the Hole, Bir Zeit – Palestine, Nov. 2011.
- Conference of the environment of Jericho and the Rift Valley, Jericho – Palestine, May 2011.
- International Congress Geotunis2010, Tunis, Tunisia in November.2010.
- The second International Conference in Integrated Water Resources Management and challenges of the sustainable development GIRA 2010, Agadir – Morocco, March 2010.
- Mining and Water, DAAD Experten Seminar, Windhoek, Namibia, in 5-10 October 2009.
- The 2nd International Conference on water Value and Rights, 13-15 April 2009, Ramallah, Palestine.
- Water Med Conference 4, water resources management, Algeria, in March 2008.
- International conference on the Sustainable Palestinian water resources management, UNESCO, 26-29. 8.2007 In Amman, Jordan.
- Integrated water resources management, third Arab water regional conference, Cairo, Dec. 2006.
- Water Med conference 2, (Marrakesh in Morocco, 14 – 17. Nov. 2005).
- International Conference Water: Values and Rights in Ramallah, 2 – 4 May 2005.
- Euro - Mediterranean Conference for Environmental Integration EMCEI 2019, The 5th Scientific International Conference of Management of mine Geology, 10-13 November 2019, Sousse, Tunis.
- Geodesy, and Environmental protection (Albena, Bulgaria 12 - 18/6/2005).
- 5th Geological Conference in Salonik in Greece: Qualitative sustainability of groundwater in the Jericho area, Hydro-chemical investigation for the Pleistocene wells and springs from Jericho area, 2004.
- LNCV international forum "food security under water scarcity in the Middle East: Problems and solution", Villa Olmo, Como, Italy: Qualitative water demand management for rural communities in the West Bank. Proceeding of the, pp 385-

- 390, 24-26 Nov. 2004.
- International freshwater conference in Bonn (Germany) Dec. 2001.
 - IAH conference in Cap Town South Africa during the period of 26th Nov. - 1.12.2000, Groundwater: Past achievements and future Challenges.
 - Hydrochemical characteristics of the Faria basin, northeastern West Bank, .
 - International conference on the water management that was held in June 2000 in Ramallah.
 - The international conference XXIV General Assembly, in the Hague / Holland (19-23/4/ 1999): Environmental isotopic investigation of deuterium, oxygen-18 and tritium of the Faria basin/ eastern West Bank
 - IAH conference in Bratislava / Slovak Republic „ Hydrogeology and land use management“ (6.-10.9.1999): Estimation of the groundwater recharge in the Faria basin, northeastern West Bank.
 - A looming water crisis in the 21th century: International water resources management UNESCO in Paris (3.-6.6.1998).
 - Internationale Uran Tagung an der TU Bergakademie Freiberg/Sachs, Germany (15-17.9.1998).
 - Gambling with groundwater in Las Vegas in the USA: Hydraulic Characteristics of the Upper and Lower Aquifer Systems of Faria Basin / Eastern West Bank, the international conference of Gambling with groundwater that was held in Las Vegas / USA (27.9. to 2.10.1998).
 - Geo-Berlin 98 in Berlin, Germany (6.10-9.10.1998): Hydrology and groundwater recharge in Faria basin / NE West Bank.
 - 7th International Symposium on water tracing (26-31.5.1997, Slovenian).
 - International conference in Modellierung in der Hydrologie (22-24/9. 1997, Dresden, Germany).
 - Internationale Uran Tagung in Freiberg, Germany (October 1996).
 - The regional workshop on the integrated water resources management, RSS, 7-9 March 2007 in Amman, Jordan.
 - Coordination of a training course in the field of water and wastewater in France, Dec 2003.
 - UNESCO workshop in Sharm El Sheekh, Egypt (23-25th Sep.2003) in IHP Program.
 - Research Program for the sustainable utilization of Aquifer Systems workshop, Dead Sea , Jordan May, 2003.
 - Workshop on the SUSMAQ project of the modeling of the western aquifer, in Amman, Jordan, March 2002.
 - Stockholm Workshop on water resources management, 2002: Effect of Sewage on the groundwater quality of Calcareous Aquifer: Case study: Wadi Zimar – West Bank / Palestine.
 - GOCAD International Meeting in Nancy / France (1-3.6.1998).
 - International Workshop on the status of the Aquifer System, June 1995, Karlsruhe, Germany.

BOOKS

- 1999 Hydrogeology and Hydrochemistry of Faria drainage Basin / West Bank, ISSN 1433-1284, TU Bergakademie Freiberg
- 2003 Environmental Health and Society for the ninth Class (Author with others), Palestine.
- 2004 Environmental right conditions of the West Bank.
- 2004 Science and knowledge Journal: Chapter 10: The effect of the development and the irrigation techniques in the promotion of the of the successive civilization in Palestine, Alesco, cairo.
- 2011 HandBook of Environmental Chemistry, Chapter : Wastewater Management Overview in the Occupied Palestinian Territory, Springer-Verlag Berlin Heidelberg, P 229 – 248.

- BLOCK COURSES

- A short course on groundwater resources management in arid environments in Newcastle Upon Tyne university in Britain in April 1994.
- A short course on earthquake engineering and seismology in Istanbul, Turkey in May 1994.- GOCAD - courses in Nancy (France) (31.5-3.6.1998).
- The following Block courses were held at the TU Bergakademie Freiberg (Germany): Hydrostatistical course (4 days): Surfer for Windows and SPSS Program, Tables calculations program (4 days): Microsoft Excel and Access and Hydrochemical Program (4 days): The PhreeqC Program.
- Geographical Information System GIS (TNT-mips) in the TU Bergakademie Freiberg / Germany (7-10/10.1997).
- Modeling groundwater flow and pollution (2.-6.11.1998 Kleinbobritch / Germany
- Postgraduate training course on Groundwater tracing techniques, in Graz, Austria (20.8.-2.9.2005).

INTERNATIONAL RESEARCH VISITS

- DAAD teaching mobility grant at RWTH, Aachen-Germany, July-August, 2018.
- Erasmos Mondus Teaching Mobility at the university of Barcelona, Spain in August 2017 (10 days).
- PADUCO II workshop at the university of Wageningen in Netherlands, August 2017
- Zamalla scholarship at Aachen University in Germany in June - July 2015 for 2 months.
- Research visit at Delft University, Holland in August 2015 (two weeks).
- Research Visit to Barcelona University, Geology Faculty from April – July 2014 (one semester) funded from the Erasmus Mondus Program AVEMPACE II.

- International Visitor Program in the field of integrated water resources Management funded from the State Dep. (USA) from the 15th of March till the 7th of April 2014.
- Research visit to Aachen University, Germany, July 2013
- Research visit to the Qadi Ayad University, December, 2012.
- Research visit to the Freiburg University in Germany in the period June and August 2009 for research and training activities (funded by DAAD).
- Research visit to the Polytechnic Lille 1 in Lille in France in July 2009, research and publications of the water management (funded by Lille University).
- Research visit to the Freiberg University in Germany in the period July - August 2006 for research and training activities (funded by DAAD).
- Research visit to the Polytechnic Lille 1 in Lille in France in July 2008, research and publications of the water management (funded by Lille University).
- Research stay at the TU Bergakademie Freiberg at the Institute of Geology and the University of Karlsruhe in July 2005 (Invitation from Prof. Merkel for presenting two lectures about the Water resources management in the West Bank).
- Research visit to the TU Bergakademie Freiberg and University of Freiburg in Germany in the period July, August and Sep. 2002 for research and training activities (funded by DAAD).

Academic Research Projects

- The geographical and hydrochemical characteristics of rainfall in Ramallah District (2011 – 2014), in 2011 funded from the Birzeit university vice president.
- The effect of segregation wall on the integrated water resources management in the western aquifer / western Ramallah, in 2011 funded from the Birzeit university vice president.
- Water and Sanitation Assessment and Management for Tulkarm District, the West Bank, Palestine together with Purdue University USA (2012)
- Hydrochemistry of the springs in Natuf Catchment together with Purdue University USA (2013).
- The Risk Management Assessment of Natuf springs / West Ramallah together with Berkley University (2013 – 2014).
- The potential of Artificial Recharge in the West Bank together with Delft University, Netherlands (2014/2015).
- Hydrochemistry and Isotopes of the spring water in Soreq Catchment – Ramallah / West Bank in 2013 funded from the Birzeit university vice president.
- The Pollution Effects of the Wastewater Flow on the Water Quality in Wadi Sarida Catchment / West Bank in 2013 funded from the Birzeit university vice president for research.
- Palestine Global Design: Spring Water Quality of Natuf Catchment West Bank, Palestine, funded by Purdu University, USA (2013).
- Mine Observatory Global, Springs funded by Berkley University, USA (2014)
- Potential for Managed Aquifer Recharge (MAR) in the West Bank in 2014/2015 funded from program PADUCO, Netherland government together with Delft University.

- Gender empowerment for the use of treated wastewater in agriculture, in 2014/2015 funded from program PADUCO, Netherland government together with Enscheda University.
- MOBILE app for optimizing, promoting Rain WATER harvesting for a self-sustaining and self-reliant water (MORWater), PADUCO II, 2017-2019.
- Improving Gender Mainstreaming in PADUCO through Applying the Gender and WASH Toolkit for Palestine, PADUCO II, 2018-2019.

IMPLEMENTED PROJECT EXPERIENCES

- Environmental Impact assessment of the wastewater pollution in Nablus West.
- Environmental Impact assessment of the water pollution in Bani Zaid, near Ramallah.
- Socio-economic environmental assessment of the water pollution in Qalt areas.
- Emergency Project in the field of water and environment (Cisterns, wastewater treatment plants,
- Water monitoring program in qualitative and quantitative point of views.
- Environmental awareness
- Job Creation in rural areas in the field of water and environment (Bani Zeid and Silwad)
- Urbanisation project: The affect of urbanization upon groundwater in Natuv catchment
- Sustainability of the aquifers in the eastern basin
- Solidwaste management project.
- Baseline survey in agricultural purposes.
- Environmental Education evaluation of Bethlehem Governate.

MEMBERSHIP

- **The International Association of Hydrogeologists IAH**
- **The Palestinian Geological Association**
- **European Geophysical Society**
- **International Hydrological Association (IHA)**
- **International of Hydrologist without borders.**
- **The German – Palestinian friendship Association.**
- **The Jordanian Geological Association.**
- **The Palestinian Geographical Association.**
- **The Arab Council for the Social Sciences**

EXPERIENCE

- **Associate Professor at Bir Zeit University, at Geography Department and Water Institute for Master Program since Oct. 2003 till now.**
- General Director of the Research and Training Unit, PHG, Ramallah (2002-Sep.2003).
- General Director of the water and environmental research center in Ramallah (2001 - 2002).
- Lecturer at the Dep. of Civil Engineering for the courses of Groundwater Engineering at Bir Zeit University (1st Semester 2001/2002).
- Supervision of one week workshop of using simple methods for teaching sophisticated phenomena in Geography Dep. Bir Zeit University (Sep. 2001).
- Consultant for the constructing an infiltration station in Bir Zeit University / M.Sc. Programs (2001).
- Lecturer at Bir Zeit University at the department of Geography for the courses of Fundamental of General Geology and Water resources management topics (second and summer semesters 2000/2001).
- Lecturer of two block courses in Hebron for the water and sanitary Engineers in the field of water resources management, water pollution and sanitation (two weeks in April 2001).
- Lecturer at Al Quds University at the department of earth sciences for the courses of environmental and geological topics (first semester 2000/2001).
- Research manager in the fields of water and environment at the PHG in Ramallah (2000 – 2001)
- Geological and Hydrogeological researcher in the PHG organization in Jerusalem (1992 - 1994).
- Teacher of Natural Sciences in Republic of Yemen for a period of two Academic years for secondary classes (1990 - 1992).
- Assistantship of six semesters for the undergraduate course (Petrology, Mineralogy, Geochemistry, Igneous and Metamorphic rocks) at Yarmouk University (1987 - 1990).

MASTER SUPERVISION

1. Bir Zeit University

2003 - 2019 Supervision of M.Sc students at the Water Institute in the Water Engineering Master program in full and part supervision and in the Geography Department:

- Sustainability of Artificial Recharge Techniques in Al-Qilt Catchment Area – Jericho District, 2018 (full).
- Pollution Aspects of Springs Water in Natuf Catchment (Ramallah area), 2017 (full).

- Environmental and socio- economical impact of wastewater in wadi- Qana drainage basin- Salfeet- Palestine, 2017 (full).
- Potentiality of Artificial Recharge in Al-Qilt Catchment Area, 2017 (full).
- The effect of wastewater flow on the groundwater recharge in Wadi El Samen Catchment, Hebron- Palestine, 2015 (full).
- Inventory of the artificial recharge practice in the eastern aquifer case study Qilt catchment, 2014 (full).
- Spatial Analyses for the medical centers in Dura city - Hebron (1967 - 2012), 2016 (part)
- Spatial Analyses of Educational and health services in Tubas District, 2016 (part).
- The effect of wastewater flow in wadi Samen on groundwater, 2014 (full).
- Hydrochemistry and Isotopes of the spring water in Soreq Catchment / Ramallah- Palestine, 2014 (full).
- The Pollution Effects of the Wastewater Flow on the Water Quality in Wadi Sarida Catchment / Westbank, 2014 (full).
- Environmental impact of the separation wall induced floods of the biosphere and crops in western Qalqilyia (part).
- Women Empowerment Toward Treated Waste Water Reuse: Reconnect Practical and Strategic Woman Needs in Palestinian Rural Area, 2013 (full).
- The environmental risk assessment of Zarqa Reserve in Natuv catchment, 2012 (full).
- The effect of cesspits to the Natuv catchment springs, west Ramallah, 2012 (full)
- The environmental, socio economical impact of the use of wastewater for agriculture in wadi Nar catchment, Bethlehem, 2012(full).
- Enhancing stakeholders participation in Environmental projects: Jordan valley as a case study (part).
- Spatial Analysis of Palestinian Refugees in Bir Zeit and its Proximity, 2010 (part)
- The effect of segregation wall in the water and environmental sector in the western of Ramallah district, 2008, (full).
- The Effect of Demographic effect on the Environment of Bir Zeit, 2008 (part).
- Hydrochemistry of the Natuv drainage basin in Ramallah area, West bank, 2007 (full).
- Wild Dumping places and their Harmful effects on the Environmnet of the central Palestinian mountains: Ramallah and Al Bireh Governate, 2007 (part).
- Land use and the application of GIS in water and soil, 2007 (part).
- Water resources assessment for al Auja surface and sub surface catchments west bank, Palestine, 2006 (part).
- Development of Human Settlement and livelihood patterns in water societies (Oasis of Jericho), 2006 (part).
- Water pollution in the central mountains of the Palestine: North Western Ramallah Villages: A case study, 2006, (part).
- Degradation of Farmland area in the central mountains of Palestine: a case study about the north – west region of Ramallah, 2006 (part).
- Groundwater flow model of the southeastern sub aquifer, Bethlehem area, West Bank, 2005 (full).
- Groundwater pollution control to bridge supply / demand gap: Northern Districts

- as a case study, Tulkarem area, 2005 (part).
- Rainfall Data and Analyses of the Auja Temsah catchment and Relation with springs discharge , 2004, (full).
- Hydrology of Faria Basin: optimization of water use and for pollution modeling of the western aquifer basin, 2003 (part).
- Monthly Recharge estimation for the western basin aquifers of Auja Temsah catchment, 2002 (full).

2. Al Quds University

- Optimization solid waste Management in Nablus Joint Service Council (part)
- Groundwater Assessment and protection Zone in Al-Fawar Wells Field, 2015 (part)
- The role of agricultural water irrigation in achieving the water and food security in Palestine, 2016 (part).
- Water tariff system from social justice of JWUT in Ramallah and Alberieh undertaking, 2016 (part).
- Estimation of the physical properties of the Pleio – Pleistocene from VES in Auja Area – Jericho, 2010 (part)
- Evaluation of domestic water resources in the occupied West Bank by using nitrate, chloride, TOC concentration, 2010 (part).
- Hydrochemical Assessment of Wadi qamrah in Dura city and Methyl tertiary butylether (MTBE) concentration in Hebron District, 2010 (part).
- The effect of the wadi Nar wastewater to the aquifer there, 2008 (part).
- The microbiological pathogens in the surface water of Jericho area, 2007 (part).
- The effect of the Western Annexation and expansion wall on the Palestinian water resources in the West bank, 2006 (part).
- Hydrochemistry and isotopic composition of the groundwater in Ein Samia, Al Auja and Al Jiftlic wells (part) in 2006.
- Hydrochemistry and isotopic composition of the groundwater wells and springs in in Marj Naja are (part) in 2006.
- Hydrochemistry and isotopic composition of the groundwater in Jericho area 2005 (part).
- The influence of rainfall sporadic on the development of agricultural sector – Faria catchment , (full) in 2004.
- Water harvesting in the West Bank, 2004, (part).
- Water pollution caused by cess-pits in the western part of Hebron, Beit Ula (full) in 2003
- A committee member of the defense of a 10 Diploma thesis in the field of water and irrigation (Oct. 2001).

3. An Najah University

- Groundwater flow modeling of Upper Faria, 2016 (part)
- GIS Based Hydrological modeling of semiarid catchments (The case of Faria catchment), 2005 (part).

- The Modeling of Eocene sub aquifer (2003) partly.
- The Bacteriological quality of drinking water in Rainfed Cisterns and Roof Storage tanks in Beet Leid and Safareen villages (2000) partly.

B. Ph.D. Defence and supervision

- Ground water quality assessment of central western basin / West Bank by using GIS modeling (2017) (part).
- Occurrences and transport of trace metals on sediment and soil at Al-Qilt catchment, West Bank, Palestine in 2015.(part).
- ETUDE DE LA QUALITE HYDROBIOLOGIQUE DES EAUX DU BARRAGE SIDI CHAHED (FES) -IMPACT SUR L'ENVIRONNEMENT ET LA SANTE in Morocco, 2014 (part).

LANGUAGES

Arabic : native
English : very good
Deutsch : very good
Hebrew : little

HOBBIES: Traveling, reading, public participatory approach, Field visits.