

Curriculum Vitae

Prof. Dr. Elias Salameh

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EDUCATION AND ACADEMIC EXPERIENCE

1. Haupt Diplom (M.Sc.) Degree in Applied Geology
Technical University of Munich / Germany.
2. Haupt Diplom (M.Sc.) Degree in Applied Geophysics
University of Munich / Germany.
3. Doctor of Science Degree (Dr. rer. nat.) in Hydrogeology and Hydrochemistry,
Technical University of Munich / Germany.
4. Professor of hydrogeology and hydrochemistry at the University of Jordan. From 1975 to 1980 assistant professor, from 1980 to 1985 associate professor and since 1985 full professor.

Scholarships and Awards

DAAD: Deutscher Akademischer Austauschdienst scholarship, 1970-1974, and many short stays in Germany.

AvH: Alexander von Humboldt scholarship, 1983.

President of the Federal Republic of Germany: Order of Merits 1st class (Verdienstkreuz 1st class), 2006

University of Jordan Award 2006

Arab Union for Astronomy and Space Sciences award 2009

EXPERIENCE

A- TEACHING

- 1- Teaching courses of hydrogeology and hydrochemistry for undergraduate and graduate students for the last 28 years.
- 2 -a Direct supervisor of 40 M.Sc. Theses in hydrogeology and hydrochemistry.
-b Co-supervisor of 25 M.Sc. Theses in hydrogeology and hydrochemistry.
- 3- Supervision of 22 Ph. D. theses, partly carried out jointly with German and other countries' Universities.

B- RESEARCH

Author of more than 160 publications in international Journals (Please see list of publications).

C- CONFERENCES

1. Initiated and organized 6 international, 4 regional and some 15 local conferences on water issues.
2. Attended some thirty international and numerous local and regional conferences.
3. Contributed to conferences of the IHS, IAEA, WB, UNDP, EU, GTZ, FES, Pugwash, IPPNW and the universities of Waterloo, Pennsylvania Harvard, Washington, Munich, Wuerzburg, Karlsruhe and Jordan.

D- ADMINISTRATIVE POSITIONS

1. Head of the Department of Geology and Mineralogy / University of Jordan 1982/1983, and 1993/1994.
2. Founder and Director of the Water Research and Study Center at the University of Jordan 1983 to 1992.
3. Headed numerous committees on water resources, developmental plans and management of the water sector.
4. In 1990 head of the Agriculture and Water Sector at the Higher Council of Science and Technology of Jordan.
5. Chairman of the Founding Committee of the German Jordanian University 2004 to 2005

6. Member in the boards of directors of:
- The Water Research and Study Center, 1983-1992.
 - Center for Consultations, Technical Services and Studies, 1985 & 1986.
 - Center for Strategic and Hebraic Studies, 1989 & 1990.
 - National Academy of Music and Fine Arts 1996-present.
 - National Academy of Science, USA, 1996-1999.
 - UNESCO , Paris 1995-1997.
 - Al-Balqa Applied University 2009-
6. Member in the Boards of Editors of:
- Hydrogeologie und Umwelt (Wuerzburg), 1991- to present
 - Acta hydrochimica et hydrobiologica (Karlsruhe) 1997- to present
 - Reem: Royal Society for the Conservation of Nature (Amman), 1998- 2003
 - Bulletin of the Water Rresearch and Study Center (Amman),1983-1992
 - International Journal of Hydrogeology (Washington), 2000 to 2006
 - Member of the Royal Committee on Water 2007- present

E- PROJECTS

Leader of Research Teams in the projects:

- Artificial groundwater recharge - use of flood water in artificial recharge of aquifers, MoP, Kuwait Fund (4 years project).
- Wastewater reuse in irrigation of Hussein Medical Center and Queen Alia International Airport, MoP & MoWI (4 years project).
- Curative waters of Jordan; Properties and medical indications, MoP & MoH (6 years project).
- Water Quality of Dams in Jordan, MoP & MoWI, (hydrology, hydrochemistry and hydrobiology), (3 years project).
- Quality of Precipitation Water in Jordan (physical, chemical and isotopic composition), MoP, (3 years project).
- Changes in the level of the Dead Sea and their effects on the groundwater resources of the surrounding areas, BMBF, (6 years project).
- Natural groundwater recharge in the Badia region, Badia, (3 years project).
- Groundwater recharge in the Eastern Mediterranean, EU, (3 years project).
- Analysed climatology of rainfall from satellite and surface data for the Mediterranean basin, EU, (3 years project).

- Groundwater artificial recharge: Jordan Valley area, HCST, (1997-2001)
- Changes in the level of the Dead Sea and its effects on the groundwater resources, BMBF, (1997-2003).
- Natural recharge in the Badia region, HCST, (1998-2001).
- Groundwater recharge eastern Mediterranean, EU, (1997-2000).
- Solar energy and sea water as elements for afforestation, HCST, (2000-2003).
- Sources of salinity in the Jordan Valley area (1999- 2003), MERC, second phase 2003-2005.
- The impacts of eutrophication on water quality and related matters, DFG (2003-2005).
- Global changes in the hydrological cycle (GLOWA), The Jordan River: the example of Wadi Shueib (2003-2005).
- Effects of climatic changes on surface and ground water.

F- CONSULTANCIES

Numerous consultancies for the Government of Jordan and different local and international private and public institutions including the World Bank, UNDP, GTZ, USAID, NAS, and GFA, Harvard University and the University of Pennsylvania in the subjects of:

- Groundwater exploration and extraction.
- Quality of surface and groundwater.
- Water administration and sector organisation.
- Environmental impacts of water projects.
- Water resources in the Middle East and in the Arab countries and their developmental and strategic importance.
- Other consultancies in the water subject for companies and ministries in Jordan, such as, cement, yeast, potash, agricultural companies and ministries: MoP, MoA, MoH, MoT, MoWI, MoF ... etc.

Details of Consultancies

*** UNDP**

1. Building S&T capacity for the Development of the Water Sector in Jordan, 1988

2. Building S&T capacity for the Development of the Natural Resources Sector in Jordan. 1988
3. Management Development of the Public Sector. Agriculture, Water and Natural Resources. 1991
4. Water pollution issues in Zerqa area and recommended alternative solutions (localising sustainable development), Medcities, Barcelona, 1999.
5. Monitoring the 20/20 compact on budget and aid restructuring, 1999.

*** GTZ**

1. Hydrochemical and Hydrobiological Pollution of the Waters of the Amman Zerqa Area. 1981
2. Promotion of a Strategy and Planning Unit in the Ministry of Water & Irrigation. 1992
3. Greater Amman Water Supply Project. 1992
4. Updating of the National Water Master Plan. 1994-1998
5. EIA of agricultural projects, GTZ-USAID project: Institutional development support project for agricultural policy implementation, ERMC, Amman 1994.
6. Constructing a groundwater module for the shallow and deep aquifers in Jordan. 1999.
7. Groundwater module for Jordan 1999
8. Setting of Guidelines for the use of treated effluents in Irrigation 2004

*** UNCED**

Water Resources of the Arab Countries - Characteristics, potentials and future prospects. DNR - Bonn (1992-1993).

*** Mott MacDonald Group + Sigma - Consultants**

Technical and Economic Feasibility Study for the Upgrading and Extension of Wadi - Arab Treatment Plant at Irbid. (1993 & 1995).

*** Rhein - Ruhr Ingenieur Gesellschaft/Deutsche Abwasser - Reinigung Gesellschaft + Sigma - Consultants**

Technical Economic and Financial Feasibility Study for:
Wastewater Collection and Treatment in the Greater Irbid Area (1990-1991)
(1996-1997)

*** University of Pennsylvania**

Water Resources of the Middle East: Resources, Economy and Management. (1987-1990).

* **Harvard University: J.F. Kennedy School of Government/World Bank**

Economic Cooperation in the Middle East - Jordan Water Project (1992-1994).

The Harvard Middle East Water Project: planning for cooperation in water resources development and management, JFK School of Government, Institute for Social and Economic Policy in the Middle East, Cambridge MA.

* **World Bank/Catholic University of America, Washington**

Jordan's Water Resources: Planning, Development and Future Scenarios (1991,1994).

* **Friedrich - Ebert Foundation and Royal Society for the Conservation of Nature**

Water Resources of Jordan - Present Status and Future Potentials (1993,1995,1996).

Water quality degradation in Jordan, 1996.

* **Center for Strategic Studies and Research Documentation, Beirut**

Water Resources Management in Jordan, (1991).

* **Environmental Impact Assessment of Wadi Rajil Dam. Azraq Project - Ministry of Municipal, Rural Affairs and the Environment, (1994)**

* **EIA of Wastewater Collection & Treatment in the Jordan Valley.**

Rural Sanitation Project, (IDA) Consult in Associate with Sigma Co., (1994).

* **Productivity Declines in the Wells of the Arab-International Company for Agricultural Development. Study for the Center of Consultation, University of Jordan, (1994).**

US-National Academy of Science: water for the future 1997-2000.

USAID: Agricultural policy charter Jordan 1996-1997.

* **World Bank**

Groundwater and aquifer management in the MENA region (2002).

Cost of environmental degradation study (2003).

* **Nordic Consulting Group**

Royal Norwegian Ministry of Foreign Affairs: Evaluation of the Center for Environment Studies and Resources Management Activities in the Middle East.

- **GITEC**
Groundwater artificial recharge in the north most Jordan Valley area 2004 – 2005.

And many other local consultancies.

G- List of Publications

1. Salameh, E. "Geological mapping and interpretation of the Alps-Margin Zone, West of Sonthofen in Allgaeu (Folded Molasse, Halvetian and Flysch)." **M.Sc. - Thesis in Geology, TUM 1971.**
2. Salameh, E. "Geoelectric soundings and their geological interpretation in the Roethelmoos syncline". **M.Sc. - Thesis in Geophysics, LUM 1972.**
3. Salameh, E. "Hydrogeology and hydrochemistry of the northern area of the Munich gravel-plain and the adjacent Tertiary deposits between the Rivers Isar and Paar". **D.Sc. - Thesis, Techn. Univ. Muechen, 1974.**
4. Salameh, E. "The discovery of gypsum in the Azraq area", *Dirasat, II, 2, 1975, Jordan.*
5. Salameh, E. & Udluft, P.: "Computing groundwater flows and aquifer permeabilities from water analysis". *Wasserwirtschaft, H. 11, 1976.*
6. Salameh, E. "Geology and hydrogeology of the University of Jordan area and its surroundings". *Dirasat, Vol. 5, 1, 1978, Jordan.*
7. Salameh, E. "The dangers of eutrophication in the King Talal Dam Reservoir". *Dirasat, Vol. 5.1, 1978, Jordan.*
8. " Salameh, E. "The Suweilih structure". *N. Jb. Geol. Palaeol. Mh., H. 7, 1980.*
9. Salameh, E. & Schneider, W.: "The Geods of Upper Cretaceous dolomites/Jordan". *N. Jb. Geol. Palaeol. Mh., H. 3, 1980.*

10. Salameh, E. "Hydrogeology and hydrochemistry of the catchment area of the King Talal Reservoir". *Z. dt. Geol.* **131, 1980, Hannover.**
11. Salameh, E. & Bandel, K.: "Hydrochemical and hydrobiological research of the pollution of the Amman Zerqa Area". *GTZ, 94; Eschborn 1981.*
12. Salameh, E. "Mercury contamination along the Zerqa River course". *Dirasat, Vol. IX, No. 1, 1982.*
13. Abdelnour, L. & Salameh, E.: "Hydrochemical comparison between an agrarian and an industrialized area in Jordan". *Dirasat, Vol. VIII, No. 2, 1981.*
14. Saliba, E. & Salameh, E.: "A new record of *Bulinus truncatus* (Jarash Pools)". *Malacological Review, 11, 1981, Michigan, USA.*
15. Salameh, E. & Rimawi, O.: "Isotope analyses and hydrochemistry of the thermal springs along the eastern side of the Jordan-Dead Sea-Wadi Araba Rift Valley". *Journal of Hydrology, Vol. 73, 1984, 129-145.*
16. Salameh, E. & Shaqqur, F.: "Geology and hydrogeology of the area west of Karak City/Jordan". *Dirasat, Vol. VIII, No. 2, 1981.*
17. Salameh, E. & Zacher, W.: "Horizontal stylolites and paleostress in Jordan". *N. Jb. Geol. Mh. H. 8, 1982.*
18. Salameh, E. "Country relevant water resources". *Dirasat, Vol. X, No. 1, 1982.*
19. Salameh, E. & Khudeir, K.: "Thermal water system in Jordan". *N. Jb. Geol. Palontl. Mh., (4) 1983.*
20. Salameh, E. "البياس سلامة: "التلوث الصناعي". المنظمة العربية للثقافة، تونس ١٩٨٣.
21. Salameh, E. "مياه الاستشفاء في الاردن". وزارة السياحة، عمان، ١٩٨٣.
22. Schneider, W., Abed, A & Salameh, E.: "Mineral content and diagenetic pattern-usefull tools for lithostratigraphic subdivision and correlation of the Nubian Series". *Geol. Jb., B53 55-75, 1984.*
23. Salameh, E. "وكمال خضر: "مناطق حماية المياه الجوفية – ومواصفات المياه". العدد الثالث. نشرة البحوث والدراسات المائية، الجامعة الأردنية، ١٩٨٤.
24. Salameh, E. "البحوث المائية في الاردن نتائج مؤتمر مياه الشرب وإصحاح البيئة". وزارة الصحة العالمية، عمان، ١٩٨٤.
25. Khouri, H. Salameh, E. & Udluft, P.: "On the Zerqa Main (Thermal Kallirhoes) Travertine/Dead Sea". *N. Jb. Geol. Paleontl. Mh., H. 8, 1984.*

26. Salameh, E. "Water resources and quality-case studies from Jordan". *German-Jordanian seminar on the cooperation in environmental sciences, Amman, May 1984.*
27. Salameh, E. & Khawaj, M.: "The Mediterranean-Dead Sea Canal, Environmental Impacts". *Water Research and Study Center, Newsletter, No. 2, 1984. University of Jordan.*
28. Salameh, E. & Udluft, P.: "The hydrodynamic pattern of the central part of Jordan". *Geol. Jb., 1985.*
29. Salameh, E. "The development of the hydrodynamic system in connection with the formation of the Jordan Graben and its effects on the generation of oil". *Beitraege zur Hydrologie SH., 5, 1985.*
30. Salameh, E. "The effects of raising the Dead Sea level on the groundwater resources of Jordan". *Dirasat, Vol. IXX, No. 2, 1985.*
31. Khoury, H. & Salameh, E.: "Leaching of Ruseifa phosphate and Maqarin bituminous limestone and its effects of the quality of groundwater". *Dirasat, Vol. XII, No. 2, 1985.*
32. Salameh, E. "Effects of the Mediterranean-Dead Sea Canal Project on Jordan's groundwater resources. *In Israel and Arab waters*", *Arab Research Center, London 1985, Ithaca press.*
33. Salameh, E. & Khudier, K.: "Groundwater qualities in Jordan". *Water Research and Study Center, Newsletter, No. 4, 1985.*
34. Khoury, H. Salameh, E. & Abdeljaber, Q.: "Characheristics of an unusual high alkaline water from the Maqarin area". *Journal of Hydrology, 81, 1985, 97-91.*
35. Salameh, E. "Curative waters of Jordan". The results of a 4-years-water and medical study *UOJ/WRSC, 1989.*
36. Salameh, E. "Mineral Resources: The technological era - continuity and change in Arab and European Societies. (ed. Dobers, H.)". *International Institute of Konrad Adenauer Foundation., St. Augustin 1985.*
37. Khoury, H. & Salameh, E.: "The origin of high temperature minerals from Sweileh area, Jordan". *Dirasat, Vol. XIII, No. 7, 1986.*
38. Salameh, E. "The reason of elevated temperature in the lower aquifer complex in central Jordan." Proceedings of *the International Congress in Groundwater in Arid and Semiarid Regions, Vol. 2, Amman/Jordan 1986.*

39. Salameh, E. " مياه الاستشفاء في منطقة عفراء". دراسة مرفوعة إلى وزارة التخطيط، الجامعة الاردنية، ١٩٨٦.
40. Salameh, E. & Rimawi, O.: "Experience gathered by wastewater reuse; water quality changes during infiltration: In Biswas, A. and Area, A. *FAO*". *The Regional Workshop on the Treatment and Reuse of Sewage Effluent for Irrigation, 10-14 August, 1986. Amman, Butterworths, London.*
41. Salameh, E. & Rimawi, O.: "Hydrochemistry of precipitation of northern Jordan. *Intern. J. Environmental Studies, Vol. 32, pp 203-216, 1988.*
42. Salameh, E. "The Potential of surface water utilization for domestic purposes in Jordan". *Intern. J. Environmental Studies, 1987, Vol. 28, 291-300.*
43. Salameh, E. & Rimawi, O.: "Natural radioactivity and hydrochemistry of some Jordanian groundwater resources". *Water Research and Study Center, Bulletin No. 9, 1987. University of Jordan.*
44. Salameh, E. Saliba, Hashwa, F. Rimawi, O. & Jriesat, R.: "The effects of Khirbet es Samra effluent on the water quality of wadi Dhuleil and Zerqa River". *Water Research and Study Center, Bulletin No. 10, 1987. University of Jordan.*
45. Salameh, E. et. al.: "Wastewater reuse in irrigation: Queen Alia Airport, Hussein Medical Center". *Research results submitted to the Ministry of Planning, Amman 1987.*
46. Rimawi, O. & Salameh, E.: "Hydrochemistry and groundwater system of the Zerqa Main and Zara Thermal Field/Jordan". *Journal of Hydrology, 98, 163, 1988, Amsterdam.*
47. Batarseh, L. Marie, A. & Salameh, E. "Fluoride content of Jordan's water". *Water Research and Study Center, Bulletin No. 11, 1988.*
48. Salameh, E. & Rimawi, O.: "Wastewater reuse in irrigation: Water quality changes during infiltration". *Food and Agriculture Organization, Un. Pp. 156-163, 1988. Ed. Asit K. Biswas and Bduallah Arar, Publ. Butterworths, London.*
49. Salameh, E. & Rimawi, O.: "Hydrochemistry of precipitation of Northern Jordan". *Water Research and Study Center, Bulletin, No. 8, 1987.*
50. Salameh, E. & Rimawi, O.: "The special features of the groundwater flow system in Central Jordan". *Dirasat, Vol. XV, 1988, No. 9.*
51. Salameh, E. بحث الموارد المائية في الدول العربية وأهميتها الاستراتيجية.

52. Salameh, E. "Curative waters of Jordan". The results of a 4-years-water and medical study **UOJ/WRSC, 1989.**
53. تلوث المياه الجوفية المسببات طرق الحماية وامثله من الاردن في ندوة حماية مصادر المياه في الاردن، تموز ١٩٨٩ الجمعية الاردنية لمكافحة تلوث البيئة.
54. وضع محطات معالجة المياه العادمة وتأثير المياه المصروفة منها على موارد المياه السطحية والجوفية ١٩٨٩ مركز البحوث .
55. Salameh, E. et al."Treated wastewater reuse in agriculture, part I". **WRSC, Bulletin No. 12, 1989.** Hussein Medical Center Project.
56. Salameh, E. et al. "Treated wastewater reuse in agriculture, part II". **WRSC, Bulletin No. 13, 1989.** Queen Alia International Airport.
57. Salameh, E.: "Water and other resources in the Middle East and their developmental and strategic importance". **APS-Conference, Cyprus 1989.**
58. Salameh, E.: "Water resources of the Jordan River System and the Surrounding Countries (Significance and Implication for Socio-economic Development)". **IIIrd International Conference on Water Law and Administration, Spain, 1989.**
59. —، وعدنان البخيت: "الموارد المائية للدول العربية وأهميتها الاستراتيجية". مركز البحوث والدراسات المائية ومركز الدراسات الاستراتيجية، الجامعة الاردنية، عمان، ١٩٩٠.
60. Salameh, E.: "Water in the Middle East, Facts and Prospects". Al Nadwah, No. 2 Vol. 2, **World Affairs Council, Amman 1990.**
61. Salameh, E. ، "تلوث المياه الجوفية – المسببات – طرق الحماية". الجيولوجي الاردني، رقم ١٤، ٢١، ١٩٩٠.
62. Salameh, E. " المياه في الشرق الأوسط (واقع وتوقعات)". مجلة الندوة، جمعية الشؤون الدولية، عمان. "المجلد الثاني، العدد الثاني، ١٩٩٠.
63. Salameh, E.: "Possibilities of utilizing the Yarmouk River flood waters in groundwater recharge". A study submitted to the Government of Jordan, 54p. **Water Research and Study Center, University of Jordan, 1990.**
64. Salameh, E. & Hazim El-Naser: "Pysical Interpretation of the Discharge Coefficient of an Aquifer, a Maillet Equation". **Hydrogeologie und Umwelt, Heft 1, 129-136, Wuerzburg 1990**
65. Salameh, E. "Water quality of swimming pools in the Amman Area". **Water research and Study Center, Bulletin No. 14, 1990.**

66. Salameh, E.: "Jordan's Water: Development and future prospects". *American-Arab Affairs*, 69-77, No. 30, USA, 1990.
67. Salameh, E. & Bannayan, H.: "Water quality of swimming pools in the Amman Area". Water research and Study Center, Bulletin No. 14, 1990.
68. Salameh, E.: "Precipitation water quality in Jordan". *Submitted to the Ministry of Planning, Amman pp. 191, 1991.*
69. Salameh, E. & Bannayan, H. "The inadequacy of stabilization ponds treatment as manifested by the effects of Khirbet Es-Samra Effluent on the groundwater quality of the surrounding area". *Hydrogeologie und Umwelt*, No. 2 Würzburg/Germany 1991.
70. مشكلة المياه في الاردن والبعد الاقليمي للمصادر الندوة ٢،٣+٣. ١٩٩١.
71. Salameh, E.: "Overexploitation and salinization of groundwater resources and accompanying saltwater intrusions". *Water Pollution in Jordan, Causes and Effects, Friedrich Ebert Stiftung, Amman, 1991.*
72. Salameh, E.: "The water resources of the Middle East and their developmental and strategic importance". *APS-Conference, Cyprus 3-5 Oct. 1991.*
73. Khoury, H. Salameh, E. Clark, I. Fritz, P. Bajjali, W. Milodowski A. Cave, M.R. Alexander W.R.: "A natural analogue of high pH cement pore waters from the Maqarin area of northern Jordan 1: Introduction to the site". *Journal of Geochemical Exploration*, 46, 1992.
74. Salameh, E.: "Wasser lostbarer als Gold, *International Physicians for the Prevention of Nuclear War*". (IPPNW), German Section, Rundbrief Nr. 37. April 1992.
75. Abu Taleb, Mareshal, Salameh, E. Deason, J& Young, K.: Multiobjective decision support for water resources planning. In Gaerber & Salameh; "Jordan's water resources and their future potentials", *Al Kutba Publishers, Amman/Jordan 1992.*
76. Salameh, E. "The Jordan River System. In Gaerber & Salameh; Jordan's water resources and their future potentials". *Al Kutba Publishers, Amman/Jordan, 1992.*
77. Salameh, E. & Gaerber A. (eds.): "Jordan's water resources and their future potentials". *Alkutba Publishers, Amman/Jordan 1992.*
78. Clark, I. Khoury, H. Salameh, E. Fritz, P. Goeksu, Y. Wieser, A. Causse, C. & Fontes J. C.: "Travertine in Central Jordan: Implications for palaeohydrology and dating". *IAEA-SM-319/6, Vienna 1992.*
79. Clark, I. Khouru, H. Salameh, E. Fritz, P. Seidlitz, H. & Milodowski, T.: "Origin of the Maqarin hyperalkaline groundwaters: isotopic and geochemical evidence for in

- situ combustion, calcination and recarbonation of bituminous marls”. *Proceeding of the 7th international symposium on Water rock interact 1985-14, WRI, 1992.*
80. Salameh, E.: Wasserressourcen der Arabischen Laender, Merkmale, Moeglichkeiten und Zukunftsaussichten”. **UNCED, DNR/BUND, Boon, 1992.**
81. Salameh, E. Rimawi, O. & Bannayan, H.: “Groundwater artificial recharge in Jordan, 197 pages”. **Water Research and Study Center, University of Jordan, 1991.**
82. Salameh, E. et. al.: “Water quality of dams in Jordan, 114 pages”. Final report, **Water Research and Study Center, University of Jordan 1992.**
83. Rimawi, O. Naqa, A. & Salameh, E.: “Hydrochemical characteristics of groundwater resources in the northeastern part of the Jordan Valley/Jordan”. **Dirasat, Vol. 19, No. 1, 1992, Amman.**
84. Abu Taleb, M. Deason J.P. Salameh, E. & Kifaya, B.: “In Country experience with water resources management Le Moigne, G. et. al. (eds.), **World Bank Technical Paper, No. 175, 1992.**
85. مشكلة المياه في الاردن الموارد ، الاستعمالات والاحتياجات مركز الدراسات الاستراتيجية والبحوث والتوثيق بيروت ١٩٩٢
86. مساهمات العلم والتكنولوجيا في حل مشكلة المياه مركز الدراسات الاستراتيجية والبحوث والتوثيق بيروت ١٩٩٢
87. Salameh, E. “The Potentials of groundwater artificial recharge on the example of Muwaqqar and Wadi Karak areas”. *Proceedings of the regional seminar on the potential of artificial groundwater recharge, WERSC Amman on 1993.*
88. Salameh, E. & Bannayan, H.: “Water Resources of Jordan; present status and future potentials”. **FES, RSCN, Amman, 1993.**
89. Abu Taleb, M. & Salameh, E.: “Environmental management in Jordan; Problems, Recommendations”. **Environmental Conservation, Vol. 21, No. 1. 1995.**
90. Salameh, E.: “Analysis of the ME water problems and options of their solution; in water as an element of cooperation and development in the ME”. **Hace Hepa University, and FNF (ed. A. Bigis), Ankara, 1994.**
91. Abu Taleb, M. Salameh, E. & Abu Moghli I.: “Environmental management and protection programs in Jordan”. **Euro-Middle East, EV, 1994.**
92. Salameh, E.: “Water resources and conflicts”. 4th **Pugwash conferences on science and world affairs, 50th anniversary of the UN, and 50th anniversary of the Hiroshima bomb, Hiroshima, 23 to 29th July, 1995, Japan.**
93. Al-Homoud, A., Hussein, A., Tal, A.B. Saket, S. and Sadoon, M.: “A review of 20 years of geotechnical studies at Na’ur landslide”. No. 4 in Jordan: **Bull. Eng. Geology, No. 51, Paris, 1995.**

94. Salameh, E.: "Water in Jordan Compared to its Surrounding Countries", 3rd Jordanian Scientific Week, Amman, 26-28 Aug. 1995, *Higher Council of Science and Technology, Amman, 1995*.
95. Al-Homoud, A., Tagieddin, S., Malkawi, A., Salameh, E. Tal, A., Saket, S., and Sadoon, M.: "A critical overview of the geotechnical studies in the Na'ur Landslide". No. 4.-*Causes and measures, Eng. Geol. 40. Pp. 103-136, 1995, Elsevier*.
96. Salameh, E.: "Water quality degradation in Jordan (impacts on environment, economy and future generation resources)", pp. 179, *FES and RSCN, Amman, 1996*.
97. Salameh, E. ١٩٩٦. قطاع المياه ومتطلباته المستقبلية الندوة: جمعية الشؤون الدولية مجلد ١٧ عدد ١٩٩٦.
98. Salameh, E.: "Jordan's Water Situation: The Bleak Picture". *Al-Nadwah*, No. 7. Vol. 4. **World Affairs Council, Amman, 1996**.
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