

Curriculum Vitae

I. Personal Data

Name : Jihad Saleh Al Mahamid
Nationality : Jordanian
Place of Birth : Amman – Wadi Al Sir
Date of Birth : 1- Oct- 1968
Marital Status : Married
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II. EDUCATION

- 1- TU-Freiberg University / Germany (2005)**
Ph.D. in Water Resources / Groundwater Modeling.
- 2- IHE – Delft / Netherlands (1999)**
Master in Hydrological Engineering / Groundwater Modeling.
- 3- Jordan University – Jordan (1998)**
M.Sc. in Environmental Sciences and Management.
- 4- IHE – Delft / Netherlands (1994)**
Post – Graduate Diploma in Hydrological Engineering.

III. Records of Professional Training & Interesting Subjects

- Developer, Lecturer and Trainer for Decision Support System – WEAP for Arabic Countries at ACSAD-Syria from 2008-till now.
- Lecturer and Trainer for Groundwater Modeling Course (Institute for National Agriculture Sciences in Tunis, INAT), Tunisia, Tunisia. 23. Nov – 30 Nov. 2008.
- Lecturer and Trainer for Groundwater Flow and Solute Transport Modeling Course for Arabic Countries at ACSAD-Syria from 2006-till now.
- Lecturer and Trainer for Groundwater Vulnerability Map Course for Arabic Countries at ACSAD-Syria from 2006-till now.
- Lecturer and Trainer for Groundwater Modeling Course (UNESCO-IHE), Nicosia, Cyprus. 22. Jan – 2. Feb. 2006.
- Lecturer and Trainer for ArcGIS Course for Arabic Countries at ACSAD-Syria from 2006-till now.
- Lecturer and Trainer for AutoCad, Arcview & Groundwater Modeling at the Ministry of Water and Irrigation - Jordan from 1997 to 2002.
- Preparation of a groundwater vulnerability map using the GLA-Method based on Surfer software (Golden Software). 11-13 Sep. 2005, Ministry of Water and Irrigation, Jordan.
- Hydrogeochemical modeling using PHREEQC. Feb., 2004. TU-Freiberg University, Germany
- Integrated data evaluation in Hydrogeology using statistic methods. Feb., 2004. TU-Freiberg University, Germany
- The Second Environmental Symposium of the German-Arabic Society for Environmental Studies," Water Resources and Environmental Protection in the Middle East and North Africa" 04-05 October 2004, Amman-Jordan.

- **Reactive Transport Modeling Course Using PHREEQC Software.** 15 Sep. 2002, Freiberg University, Germany.
- **International Conference of Uranium Mining and Hydrogeology III** 15-20 Sep. 2002, Freiberg University, Germany.
- **Water Resources Management “Data Testing and Practical Examples on Water Resources Management Methods”,** 19-30 May 2002, BGR, Jordan.
- **Workshop on Application of mathematical Modeling Techniques for Management and Planning of Water Resources,** 10-14 March 2002, Cairo, Egypt.
- **Groundwater Quantification and Validation of Groundwater Models,** June 17-24, 2001. Hannover, Germany.
- **GIS-Based Water Resources Management,** 16-27 October 2000, Washington State University, USA.
- **Regional Workshop on Sustainable Groundwater Management,** June 26-29, 2000. Sana'a, Yemen.
- **Groundwater Transport Modeling Course –** Esslingen, 1998, Germany.
- **Groundwater Transport Modeling Course –** Heidelberg, 1998, Germany.
- **Workshop on Groundwater Modeling in ACSAD ,**16-21 June, 1996, Syria.
- **Workshop on Hydrological Isotopes at Ministry of Energy and Mineral Resources - Amman** (12-20/12/92).

IV. Languages

1. Arabic (Excellent)
2. English (very good)
3. German (good)

V. Experiences and Duties

From 1992-2002: Ministry of Water and Irrigation-Jordan,

- Groundwater Modeler under supervision of German Experts (As a counterpart under the project name: Advisory Services to the Water Authority of Northern Part of Jordan).
- Preparing of hydrological and hydrogeological maps by AutoCad, Arcview and ArcGIS.
- Evaluation of pumping tests analysis.
- Evaluation and interpretation of water quality analysis.
- Preparing solute transport modeling to investigate the source of pollution.
- Preparing geochemical modeling to evaluate the geochemical process, mixing, etc.
- Preparing of groundwater modeling to investigate the available amount of water and estimate the safe yield of the groundwater potentiality for more than 10 investigation areas in Jordan

From 2002-2005: TU-Freiberg University, Germany.

- Ph.D. Researcher and Trainer in the field of groundwater flow and solute transport modeling at the Technical University of Freiberg – Germany.

From 2006-2012: League of Arab States - ACSAD

- Manager of Integrated Water Resources Management Program.
- Groundwater Modeling Expert at the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD).
- Hydrogeologist Expert in the Arab Regions.
- Hydrochemist Expert (Solute Transport modeling).
- Groundwater Vulnerability and Hazards to Groundwater (DRASTIC and other approaches).

From 2012 until now: Ministry of Water and Irrigation

- Director of GIS and Mathematical Modelling Directorate.
- Regional Project Manager - Regional Coordination on Improved Water Resources Management and Capacity Building for MINA countries.
- Project manager – Three Dimensional Groundwater Modelling for Jafer Basin in Jordan.
- Project manager – Three Dimensional Groundwater Modelling for Hammad Basin in Jordan.
- Project manager –Groundwater – Flow Modelling of the Dead Sea Basin, Additional Programme to the Jordan Deep Aquifers Modelling Project.

Project Coordinator:

2006-2007: North Palmyra Project-Syria. Groundwater Modeling, Hydrogeological and Hydrochemical Studies.

2006-2008: Jifarah Basin. Preparation Groundwater Vulnerability and Hazards to Groundwater in the Jifarah Basin, North-West of Libya.

5. **2006-2012: Management, Protection and Sustainable Use of Groundwater and Soil Resources in the Arab Region Project between ACSAD-BGR. A Decision Support System for Water Management and Water Planning (DSS) in the Middle East and North Africa.**

VI. Computer Skills in the Water Area:

Trainer and extensive experience in using most existing groundwater and surface water models and relevant software:

- **WEAP - water evaluation and planning system.**
- **GMS - groundwater modelling system.**
- **PMWIN - processing modflow pro.**
- **ASM - aquifer simulation model.**
- **VM - visual modflow.**
- **PMPATH - processing modflow for path particle Tracking (Advective Transport).**
- **PEST - parameter estimation in modeling.**
- **MT3D - 3-dimensional groundwater transport model.**
- **WMS - watershed modelling system.**
- **SMS- surface modelling system.**
- **SMADA - hydrologic and storm water management and drainage analysis package.**
- **ArcGIS - geographic information system.**
- **AutoCAD.**

VII. Publications

a. Papers:

1. **GROUNDWATER MANAGEMENT USING MODFLOW MODEL IN JERASH CATCHMENT AREA/JORDAN. Ass. Univ. Bull. Environ. Res. Vol. 16 No. 2 October 2013.**

2. Optimizing Pumping Rates of Hallabat-Khalidiya Wellfield Using Finite-Difference Model: A case Study for Evaluating Overpumped Aquifer in Arid Areas (Jordan). Journal of Arid Environments, Vol. 52, pp.259-267. Elsevier, Cambridge, England. (www.sciencedirect.com)

3. A numerical Model of the Muwaqqar Wellfield; A case Study for Evaluation the Reactions of the Hydraulic System to Groundwater Withdrawal in the Arid Areas (Jordan). The Society for Computer Simulation (SCS), The First Middle East Workshop on Simulation and Modeling, Belgium.
(<http://www.scs-europe.net/conf/mideast99/mesmprelprog.html>)

4. Status of Groundwater Quality in Jordan (2006) . Regional Conference for Groundwater Protection. Tripoli, Libya.
(http://www.unesco.org/water/water_events/Detailed/1386.shtml)

5. A Decision Support System (DSS) for Integrated Water Resources Management (IWRM), Case Studies in Arab Region. The 9th Gulf Water Conference " Water Sustainability in the GCC Countries". 22-25 March 2010, Sultanate of Oman.

b. Technical Reports (Published in Specialized Local, International and Regional Conference and Workshop Proceedings)

1. A numerical Model of the Muwaqqar (South Jordan) Well Field (1996).
2. Three Dimensional Groundwater Model of Northern Jordan (1997).
3. A numerical Model of the Siwaqa-Qatrana-Hasa (South Jordan) Well Field (1998).
4. Three Dimensional Numerical Model for Groundwater Flow and Contaminant Transport of Dhuleil-Hallabat (North Jordan) Aquifer System (1998).
5. A numerical Model of the Musaitbeh (South Jordan) Well Field (1999).
6. A numerical Model of the Corodor (North Jordan) Well Field (1999).

7. Contributions to the Hydrogeological Units in Northern Jordan (2001).
8. A numerical Model of the Wadi Musa (South Jordan) Well Field (2002).
9. Hydrogeological and Numerical Model of North-Palmyra (Central Syria) Regional Model (2007).
10. Groundwater Vulnerability and Hazards to Groundwater in the Jifarah Basin, North-West of Libya (2007).
11. Development of a Numerical Groundwater Flow Model for the Larger Orontes Basin (2008).

VIII. Referees

1. **Prof. Dr. Broder J. Merkel**
Dean of the Faculty for Geosciences, Geotechnique and Mining
TU - Freiberg University of Mining and Technology, Germany.
merkel@geo.tu-freiberg.de
2. **Prof. Dr. Peter Udluft**
Institute of Hydrogeology – Wuerzburg University, Germany
3. **Dr. Hazim El Naser**
Minister of Water and Irrigation
hazim_elnaser@yahoo.com
4. **Prof. Dr. Mohammad Shatanawi**
UNESCO-EOLSS Chair in Wadi Hydrology – Jordan.
shatanaw@ju.edu.jo
5. **Dr. Abdullah Droubi**
Director of Water Resources Division, ACSAD.
droubi@scs-net.org
6. **Dr. Radwan Al-Weshah**
International and Regional Water Expert
weshahl1@yahoo.com

2006-2008: Orontes Basin Project-Syria. Development of a Numerical Groundwater Flow Model for the Larger Orontes Basin.

2008-2010: Haramoun Area (Jabal Al Sheikh) – Syria. Damascus Rural Water and Sanitation Project-Water Resources Evaluation: Current Situation and further Steps.

This project aims to the development of new water and wastewater infrastructures (such as: water source development, treatment and distribution of drinking water, etc) for a population of about 220,000 persons in 14 municipalities, located in an area of 2000 km² south of Damascus city is successfully and accomplished by local administrative until end of 2010.

2010-2012: Costal Basin Project – Syria. Evaluation and Management (Water Balance) of available water resources as well as Development of a Numerical Groundwater Flow Model for the Whole Basin.

Project Counterpart:

1. 1992-2000: **Groundwater Resources of Northern Jordan Project** (Water Authority of Jordan and the Federal Institute for Geosciences and Natural Resources-BGR). Geological, hydrogeological, Groundwater modeling, protection zone and vulnerability maps studies.
2. 1999-2001: **Jordan Water Resources Policy Support Project** (Ministry of Water and Irrigation and USAID with cooperation of ARD Inc.). Supporting for improved management of water resources in Jordan.
3. 2005 to 2006: **Groundwater Resources Management Project** (Ministry of Water and Irrigation of Jordan and the Federal Institute for Geosciences and Natural Resources-BGR). Vulnerability maps, protection zone, Groundwater flow and solute transport modeling.
4. 2006-2012: **Water Harvesting and Quality Projects.** The Arab Center for the Studies of Arid Zones and Dry Lands – ACSAD, Syria.