

CURRICULUM VITAE

1. PERSONAL DATA

SURNAME: AL-TARAZI
FORENAME: Eid A. E.
DATE & PLACE OF BIRTH: 20 MARCH 1963-Jerash, JORDAN
NATIONALITY: Jordanian
CURRENT OCCUPATION: Dean of Faculty of Natural Resources & Environment
at the Hashemite University, Jordan
MARITAL STATUS: Married & have two children
CORRESPONDENCE ADDRESS: Dep. Of Earth & Environmental Sciences,
Hashemite University, P.O.Box 150459, 13115 Zarqa, JORDAN
Tel: +(9625) 3903333
Fax: +(9625) 3826815
Mobile: 079-5651567
E-Mail: eid@hu.edu.jo or
ealtarazi@yahoo.com

2. EDUCATION & Awards:

1981 - 1985: B.Sc. - Geology, Yarmouk University, Jordan.
1985 - 1987: M.Sc. - Geophysics, Jordan University, Amman, Jordan.
1989 - 1992: Ph.D. - Geophysics, Ruhr University Bochum, Germany.
1989 - 1992: DAAD - Scholarship for PhD study.
2002 - 2002: GFZ - Invited researcher-Potsdam, Germany.
2003 - 2003: DAAD - Scholarship (research, GFZ, Germany)
March 2004 - Sep. 2004: Fulbright -visitor professor: Stanford and
Missouri at Columbia Universities, USA

2.1. Title of Ph.D. Dissertation

Al-Tarazi, E., "Investigations and Assessment of Seismic Hazard in
Jordan and Its Vicinity", Institute of Geophysics, Ruhr University
Bochum, Germany, 194pp, November 1992.

2.2. Title of M.Sc. Thesis

Al-Tarazi, E., "Lithospheric Shear Wave Structure of the Jordan-Dead
Sea Area", Department of Geology & Mineralogy, Jordan University,
Amman, Jordan, 112pp, July 1987.

2.3. AREA of SPECIALIZATION: Environmental Geophysics & Seismology.

3. PROFESSIONAL EXPERIENCE:

Since May, 2008: Full Professor
2001/Feb.-April, 2008: Associate professor
2005-Present: Dean of Faculty of Natural Resources & Environment

2007-2009: Head of Center of Environmental Studies at the Hashemite university.

2004-2005/Sep.: Dean of Students Affairs at the Hashemite University.

1/9/1999-15/9/2001: Head of the Department of Earth and Environmental Sciences/Hashemite University/Zarqa/Jordan.

1995-2001/Jan.: Assistant Professor (rank A since Sep. 1999) in Geophysics and Seismology, Department of Earth & Environmental Sciences, Hashemite University.

1995-1987: Natural Resources Authority, Amman, Jordan, Geophysicist, Seismologist.

1987-1985: Teaching Assistant/Applied Geophysics and Geology, Geology and Min. Institute, Jordan University, Amman.

3.1. LANGUAGES: Read: Arabic, English and Germany.
Write: Arabic, English and Germany.
Speak: Arabic, English and Germany.

3.2. COURSES TAUGHT: Principles of Geophysics, Environmental Geophysics, Seismology, Engineering Geophysics, Natural Disastrous & Environment, General Geology Courses, General Geology Labs, Environmental Geology and Introduction to Environmental Sciences.

Postgraduate courses: Applied Geophysics (Hashemite University), Environmental & Engineering Geophysics (Yarmouk University).

4.0 LIST OF PUBLICATIONS:

4.1 Papers submitted for Professor Promotion:

Al-Tarazi, E., Investigations of the effects of Destructive Earthquakes on the Ancient Cities of Jordan, J. Abhath al-Yarmouk: "Basic Science & Eng.", 12, 2A, 329-343, 2003.

Al-Tarazi, E., Estimation of horizontal response spectra and peak acceleration of the major cities in Jordan, Published in the Proc. of the Fourth International Conference on Seismology and Earthquake Engineering, 12-14 May, 2003, Tehran, pp20.

Al-Tarazi, E., Detecting earth cracks utilizing seismic refraction technique in the Lisan Peninsula, Dead Sea, Jordan, J. Abhath al-Yarmouk: "Basic Science & Eng." 13, no. 1, 147-160, 2004.

Shiyab, M., **Al-Tarazi, E.** Structural and geotechnical aspects of the 1995 Gulf of Aqaba earthquake, J. Structural Eng./ Earthquake Engineering, JSCE, 21, no. 1, 57-65, 2004.

Al-Tarazi, E., Investigation of the effects of earthquake swarms in the seismic hazard in the Gulf of Aqaba, Northern Red Sea, J. of Dirasat, 32, no. 1, 55-68, 2005.

- Al-Tarazi, E.**, Some statistical aspects of earthquake occurrence of the 1983, 1993, and 1995 sequences of the Gulf of Aqaba, *J. Dirasat*, 33, no. 2, 195-208, 2006.
- Al-Tarazi, E.**, Sandvol, E., and Gomez, F. The February 11, 2004 Dead Sea Earthquake $M_L=5.2$ in Jordan and its tectonic implication. *Tectonophysics*, 422:149-158, 2006.
- Al-Tarazi, E.**, Al-Naqa, A., El-Whedy, M., Abu-Rajab, J., Electrical geophysical and hydrogeological investigations of groundwater aquifers in Ruseifa municipal landfill, Jordan, *Environmental Geology*, 50:1095-1103, 2006.
- Al-Tarazi, E.**, Korenjkov, A., Archaeoseismological investigation of the ancient Ayla site in the city of Aqaba, Jordan, *J. Natural Hazards*, 42:47-66, 2007.
- Al-Tarazi, E.**, Sandvol, E., Alternative models of seismic hazard evaluation along the Jordan Dead Sea transform. *Earthquake Spectra*, 23:1-19, no.1, 2007.
- Al-Qaryouti, M., **Al-Tarazi, E.**, Local site effects estimated from ambient vibration measurements at Aqaba city, Jordan, *Journal of Earthquake Engineering*, ICP, 11:44-55, 2007.

4.2. Recently published paper:

- Al-Jundi, J., **Al-Tarazi, E.**, Radioactivity and elemental analysis in the Ruseifa municipal landfill, Jordan, *Environmental Radioactivity*, 99:190-198, 2008.
- Al-Tarazi, E.**, Al-Naqa, A., El-Whedy, M., Abu-Rajab, J., Detecting leachate plumes and groundwater pollution at Ruseifa municipal landfill utilizing VLF-EM method, *J. of Applied Geophysics*, 65: 121-131, 2008.
- Al-Oufi, A.; Mustafa, H.; **Al-Tarazi, E.**; Abu Rajab, J., Exploration of the extension of two lava tubes, faults and dikes using very low Frequency-Electromagnetic technique in Umm El-Quttein area, NE Jordan, *Acta Geophysica*, 56, no 2, 2008.

4.3. Papers published for Associate Professor Promotion:

- Malkawi, A., Al-Homoud, A., Al-Tarazi, E., and Nusier, O. "Probabilistic Seismogenic Ground Motion Hazard Assessment of Karak City in Jordan, *J. Environmental & Engineering Geoscience*, vol. I, No. 2, pp. 207-218, 1995.
- Al-Tarazi, E., "Assessment of Seismic Hazard in Jordan and its Vicinity", *Journal Natural Hazard*, vol. 10, nos. 1 & 2, p. 79-96, 1995.
- Al-Tarazi, E., & Qadan, H., "Seismic Hazard Potential Expected for the Dams in Jordan", *Journal Dirasat*, vol. 24, no.2, 313-325, 1997, Jordan University, Amman.
- Al-Tarazi, E., "Regional seismic hazard study for the eastern Mediterranean (Trans-Jordan, Levant and Antakia) and Sinai region", *J. of African Earth Sciences*, 28, No. 3, 743-750, 1999.

Al-Tarazi, E., Seismic characteristics of the Jordan-Dead Sea Transform fault system and their future indications, *J. Dirasat*, 26, no. 2, 271-283, 1999.

Al-Tarazi, E., & Qadan, H., "Probabilistic seismic hazard study and design curves for structures in Greater Amman-Jordan", *Journal Abhat Al-Yarmouk*, Jordan, 9, no. 2, 83-98, 2000.

Al-Tarazi, E., "The Major Gulf of the Aqaba earthquake 22, November 1995-Maximum intensity distribution", *J. Natural Hazards*, 22:17-27, 2000.

5. OTHER SCIENTIFIC RESPONSIBILITIES:

5.1. Supervising the following M.Sc. Thesis:

- ❑ Evaluation of Uranium Ores in northern Al-Mafraq area north east Jordan utilizing environmental geophysical techniques, by Naremman Al-Qadoumi, 2009.
- ❑ Hydrocarbon exploration in Al-Ramtha area following Seismic refraction techniques, by Ali Al-Zeoud, 2009.
- ❑ Exploration of hydrocarbon in Al-Mafraq area utilizing seismic refraction approach, by Yaser Al-Shourbaji, 2009.
- ❑ Structure and Hydrocarbon Potential Characterization of the Jafr basin, south-central Jordan, by Walaa'a, Saeed, 2008.
- ❑ Determine site effect of Zarqa city based on microtremors field measurements: A microzonation study, by Waleed Olimat, Hashemite University, 2006.
- ❑ Seismicity, seismotectonics & seismic hazard assessment of the Jordan Dead Sea transform, by Asma Ghanam, 2005.
- ❑ Evaluation of seismic risk in Greater Amman area utilizing microtremor measurements, by Rawan Sarayrah, Hashemite University, 2005.
- ❑ Geophysical exploration of lava tubes in Umm El-Quttein Area, NE Jordan. By Ahmad Al-Oufi, Yarmouk University, 2006.
- ❑ Assessment of grouting efficiency using geophysical & engineering geological investigations, case study: Mujib dam project, Jordan Valley, by Mah'd Al-Shraideh, Hashemite University, 2005.
- ❑ Assessment and mitigation of earthquake hazards in the Greater Amman Area", Submitted by S. Jaber, Faculty of Graduate Studies, Jordan University, Amman, Jordan, December, 1994.

- ❑ Environmental Impact Assessment Study of El-Ruseifa Solid waste Landfill on Groundwater using Geo-electric Geophysical Methods, Submitted by J. Abou-Rajab, to the Faculty of Research and Graduate Studies, Yarmouk University, March, 2000.

5.2. External examiner of the following M.Sc. Thesis:

- ✓ Geotechnical evaluation of Umm Qays basalt, North Jordan, by Karam Dagamseh, Hashemite University, 2008.
- ✓ Mineralogical & Geotechnical evaluation of limestone's in Wadi Al-Ghadaf, Jordan, by Haneen Al'amoush, Hashemite University, 2006.

- ✓ Environmental & geological evaluation of newly discovered Al-Fahda lava tunnel, NE-Jordan; and their conservation possibilities as a potential Geotop, by Mah'd Friehat, Hashemite University, 2006.
- ✓ Estimating emission rates for greenhouse gases (GHGs) emitted from On-road motor vehicles and their impact on ambient air quality, by Maamoun Al-Jedaih, Hashemite University, 2006.
- ✓ Ore reserve calculation of bentonite & diatomite in Azraq basin Jordan, by Aber Sharief, Hashemite University, 2005.
- ✓ Seismic hazard assessment and evaluation of dynamic site periods in Karak city, Submitted by O. Nusier, Department of Civil Engineering, Jordan University of Science and Technology, Jordan, November, 1993.

5.3. External Examiner of the following Ph.D. thesis:

1. "Earthquake strong motion data analysis of the Gulf of Aqaba activity for 1993-2001 and engineering seismology implications in Aqaba area", by M. Al-Qaryouti, PhD. Thesis, Jordan University, Amman, Jordan, 188pp, January, 2002.

5.4. In the Editorial committee of "MESF CYBER International Journal of Geosciences".

5.5. Referee for International and local Journals:

- Bulletin of Seismological Society of America (BSSA).
- Environmental Geology J., Elsevier.
- Natural Hazards Journal, Kluwer academic Publishers.
- Applied Geophysics Journal, Elsevier Publishers.
- Dirasat Journal, Jordan University, Jordan.
- Abhat Al-Yarmouk Journal of Research, Yarmouk University, Irbid, Jordan.
- Al-Zarka Journal of Research & Studies, Zarka Private University, Jordan.
- Al-Najah scientific university J.

5.6. Current and Previous Research Activities:

1. Coordinator of the project entitled:
Arid lands watershed evaluation and monitoring with Bio-solid application, together by Hashemite University, BRDC in Amman, International Arid Lands Consortium (IALC), and university of Arizona, funded by USAID, 2007-2010.
2. Coordinator of the project entitled:
Evaluation and improvement of water resources at the Jordanian Petroleum Refinery, Zarqa, together with scientists from both the Hashemite and Al-Balqa universities, 2009.

3. Coordinator of the Hashemite university team of the project entitled:

Restoration of Terrestrial Ecosystems in Jordan Badia (Badiah Restoration Program, BRP), together with JRF, JUST, BRDC, and JOHUD institutions in Jordan, 2009-2016.

4. Coordinator of the Hashemite university team of the project entitled:

Biowaste and algae knowledge for the production of 2nd generation biofuels, together with scientists from Italy, Denmark, Sweden, Spain, Latvia, and India, funded by FP7, 2009-2011.

5. Coordinator of the project entitled:

Development Services for a Regional Badia Development, UNDP, 2007.

6. Coordinator of the project entitled:

Arid lands watershed evaluation and monitoring with Bio-solid application, with BRDC /Jordan and USAID, 2007.

7 Seismic Hazard Assessment Study For Jordan utilizing GPS techniques, sponsored by both University of Missouri at Columbia, USA, and the Hashemite University, Jordan, 2004-2008.

8 The Development of the Northern Badia Region. Sponsored by the Higher Council for Science and Technology, Jordan, **1997-2004**, entitled:

Geomorphology, Stratigraphy, Sedimentology and Basin Analysis of the Northern Badia Region, Jordan

9. Coordinator of the Geophysics team and member of the steering committee of the project entitled:

Assessment of Earthquakes Hazard in Jordan and Mitigation of their Environmental Impacts using geophysical and geotechnical techniques

Sponsored by the Higher Council for Science and Technology, Jordan, 1997-2004.

10. Main researcher of the project entitled:

Investigation of Groundwater Impacts at Ruseifa Landfill Sites using Geophysical and Hydrogeochemical Methods.

Sponsored by the Higher Council for Science and Technology, Jordan, 2000-2004.

6. SCIENTIFIC ACTIVITIES (Conferences & Workshops):

- ❖ Third Jordanian Geologists Association **Conference**, 3-5 April 1988, Amman.
- ❖ CRASH **Workshop**, European Seismological Commission (ESC), 26-30 November 1990, Prague.

- ❖ The 51 Annual **Conference** of the German Geophysical Association, March 11-15, 1991, Ruhr-University Bochum, Germany.
- ❖ The XX **General Assembly** of the International Union of Geodesy and Geophysics (IUGG), August 11-24, 1991, Vienna, Austria.
- ❖ The XXIII **General Assembly** of the European Seismological Commission, September 7-12 1992, Prague.
- ❖ **Workshop** on Geotectonic and Seismicity of the Jordan Rift and the Important of Applying an National Program to Mitigate the Seismic Hazard, 7 Dec., 1992, Yarmouk University, Irbid, Jordan.
- ❖ **Workshop** on Earthquakes: Occurrence Effects on Structures, and Mitigation's of their Risk, 30 Jan., 1993, Jordanian Engineers Association, Amman, Jordan.
- ❖ **Workshop** on the Karamah Dam Project: State of the Art From Geological, Geophysical, Construction points of View, Jordanian Geological Association, 11 May, 1993, Amman, Jordan.
- ❖ The first Jordanian Mining **Conference**, Jordanian Engineering Association, April, 20-23, 1994.
- ❖ The fifth Jordanian Geological **Conference**, Jordanian Geological Association, October 3-5, 1994.
- ❖ **Seminar** on Earthquake Engineering, Engineering Faculty, Cairo University, 28 Nov.- 5 Dec., 1994, Cairo, Egypt.
- ❖ The 29th **General Assembly** of the International Association of Seismology and Physics of the Earth's Interior, August, 18-29, 1997, Thessaloniki, Greece.
- ❖ Seismic Safety of Big Cities, **World Forum**, September, 21-25, 1998, Istanbul, Turkey.
- ❖ The 6th Jordanian Geological **Conference** (Earth Resources Basis of Sustainable Economic Development), University of Jordan, Amman, Jordan, October, 5-8 1998.
- ❖ Geology of the Arab World (5th International **Conference**), Cairo University, Cairo, Egypt, February, 21-24, 2000.
- ❖ Seismicity and earthquake hazards in Jordan, **Workshop** organized by the Jordanian Geologists Association, Amman, July 2 2000.
- ❖ The 7th Jordanian Geological **Conference**, University of Jordan, Amman, Jordan, October 2-4, 2001.
- ❖ The 2002 International **Conference** on Roller Compacted Concrete Dam Construction in Middle East, JUST, Jordan, April, 7-10, 2002.
- ❖ The **XXVIII Assembly** of ESC, Genoa, Italy, 1-6, September, 2002.
- ❖ The SEE4 international conference held in Tehran, May, 12-14, 2003, Iran.
- ❖ The VIII International Conference of ESC, Vienna, 2006.
- ❖ The 9th International Geological Conference, JGC, Amman, 2007.
- ❖ The Eight International conference of Mining Engineering, JEC, Amman, 2007.
- ❖ Chairmen of the 2nd, 3rd, 4th, and 5th scientific days of the faculty held in the period 2006-2009.
- ❖ Chairman of the 5th scientific day :Recycling in Jordan as an national ambition, 14-16th April, 2009.

7.0 COMMUNITY SERVICES:

7.1 Training Courses: Participation in the training courses for schoolteachers, Ministry of Education and the Jordan Hashemite Charity Organization as follows:

- 1998 (March to April): Training course for teachers of Zarqa schools.
- 1998 (December): Training course for teachers of Zarqa and Amman schools.
- 2000-2008: Training courses for Engineers, Medicines and other Scientists in the Jordan Hashemite Charity Organization/Disaster Management Center, Amman, In Assessment and mitigation of Natural Hazards in Jordan.

7.2 Consultations: many consultations have been undertaken for governmental and private bodies in Jordan among of which are the following:

- ✓ **Wadi Ibn Hamad Dam/Karak (Jordan):** assess the seismic hazard expected at dam axis site, 1995.
- ✓ **Wadi Al-Wala Dam/Madaba (Jordan):** geophysical seismic refraction survey along the Dam axis site, June 1999, April and June 2000.
- ✓ **Lisan Area-Dead Sea (Jordan):** geophysical seismic refraction survey along the SPOB-Pan, Potash Company, January 2000.
- ✓ **Wadi Al-Mujib Dam/Karak (Jordan):** geophysical seismic refraction survey along the Dam axis, March 2000.
- ✓ **Wadi El-Sir Sewage Treatment Plant-Amman (Jordan):** geophysical seismic refraction survey near the landslides, April 2000.
- ✓ **El-Ruseifa Community Park-Zarqa (Jordan):** geophysical seismic refraction survey along the Landfill area, April 2000.
- ✓ **Al-Lajuun Proposed Sewage Treatment Station/Karak (Jordan):** geophysical seismic refraction and resistivity Surveys, November 2001.
- ✓ **Al-Karamah-Jordan River Proposed Canal,** geophysical seismic refraction survey **Jordan Valley, November 2002.**
- ✓ **Rehab power station project,** geophysical seismic refraction survey **Mafraq, Jordan, 2003.**
- ✓ **Several EIA studies for different environmental, industrial projects in Jordan (Zarqa, Amman, Aqaba, Irbid and Al-Magfraq Governorates) 2005-2008.**
- ✓ **2005-2009: Several consultations for Construction and designing companies regarding assessment of hazards and site effects evaluation of huge projects such as Al-Wehda dam, the proposed atomic nuclear station site in Jordan among many others...**

7.3 Many interviews in the Jordanian TV's, Radio, and daily newspapers.

7.4 Social Services: Vice-President of Al-Fayha Association, Jarash, Jordan, 1999-Present.

8. University Committees:

Participated in many committees at the Department of Earth and Environmental Sciences, at the Institute of Land, Water, and Environment, and at the Hashemite University as a president, vice-president, co-ordinator, or member, among of which are the following:

1. Employment and Promotion Committee of the Department-Member-
2. Examination Committee of the Institute -Co-ordinator-
3. Library Committee of the Department -Member-
4. Scientific Research Committee of the Institute-Member-
5. Instruments & Materials Committee of the Institute -Co-ordinator-
6. Institute of Land, Water, and Environment Council/Hashemite University -Member-
7. University & Society Committee of the Institute of Land, Water, and Environment - Co-ordinator-
8. The Housing Fund Committee/Hashemite University -Member-
9. Employers Club of the Hashemite University -Vice-President-
10. Committee of students Issues/Hashemite University - President-
11. Corporation Association of the Workers/Hashemite University - observer-
12. Environmental Club of the students/ Hashemite University - consultant-

9. MEMBERSHIP IN SCIENTIFIC SOCIETIES:

- Member - Jordanian Geological Association (JGA).
- Member - Jordanian Environmental Society (JES).
- Member - American Geophysical Union (AGU).
- Member - Seismological Society of America (SSA).

10. Computer Command

Very long experience in using FAX, UNIX systems, and PC's as well since 1987. Recently I participated in "E-learning technologies course" using different tools such as the "Front pages" and the "Blackboard". Currently I design my own website that containing the courses I taught in the Hashemite University (mainly Geophysics and seismology courses) utilizing the Blackboard software.