### 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: <u>Prof. of Applied Geophysics</u>, <u>Editor-in-chief</u>: Jordan Journal of Earth and Environmental Sciences/JJEES/ISSN 1995-6681, Scopus Elsevier since 2021.

MARITAL STATUS: Married & have three 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

## 2. EDUCATION & Awards:

1981 - 1985: B.Sc. - Geology, Yarmouk University, Jordan.

1985 - 1987: M.Sc. - Geophysics & Seismology, Jordan University, Amman,

Jordan.

1988 - 1992: Ph.D. - Applied Geophysics, Ruhr University Bochum,

Germany.

1988 - 1992: DAAD - Scholarship for PhD study.

June 2002 - Sep. 2002: GFZ - Invited researcher-Potsdam, Germany.

June 2003 - Sep. 2003: DAAD - Scholarship (research, GFZ, Germany)

Sep. 2004 - Sep. 2005: Fulbright -visitor professor: Stanford University

and Missouri at Columbia University, 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: Exploration, -Engineering- and Environmental-Geophysics & Seismology.

## 3. PROFESSIONAL EXPERIENCE:

Sep. 2020-Sep. 2022: Dean of El-Hassan Bin Talal Faculty of Natural Resources and Environment, Hashemite University.

Since 2021: Editor-in-chief: Jordan Journal of Earth and Environmental Sciences/JJEES/ISSN 1995-6681, Scopus Elsevier since 2021

Sep. 2013-Sep. 2018: <u>Director</u> of Center of Environmental Studies/Hashemite University.

Sep. 2012-September 2015: Editor-in-Chief of Jordan Journal of Earth & Environmental Sciences, an international peer reviewed scientific journal, published by the Hashemite University in corporation with the Jordanian Scientific Research Support Fund/Ministry of Higher Education & Research, http://jjees.hu.edu.jo/, ISSN: 1995-6681.

Since May, 2008: <u>Full Professor</u> of Applied, Engineering & Environmental Geophysics & Seismology.

Since September 2010-2017: Member of the national committee of selecting the Jordanian Nuclear power plant Site.

2011-2013: <u>Dean</u> of Faculty of Natural Resources & Environment/Hashemite University.

2005-2009: <u>Dean</u> of Faculty of Natural Resources & Environment/Hashemite University.

2007-2009:  $\underline{\text{Head}}$  of Center of Environmental Studies at the Hashemite University.

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

2001/Feb.-April, 2008: Associate professor

1/9/1999-15/9/2001: <u>Head</u> 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.

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

1985-1987: 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, Applied & Exploration Geophysics (Hashemite University), Environmental & Engineering Geophysics (Yarmouk University), Applied Geophysics (Al-Al Bayt University).

### 4.0 LIST OF PUBLICATIONS:

## 4.1 Papers submitted for Professor Promotion & after:

- 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<sub>L</sub>=5.2 in Jordan and its tectonic implication. Tectonophysics (impact factor 2.7),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 (impact factor 1.1), 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.
- 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 (impact factor 1.9), 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, ActaGeophysica (impact factor 1.7), 56, no 2, 2008.
- Al-Tarazi, E., Abu Rajab, J., Gomez, F., Cochran, W., Jaafar, R., Ferry M., 2011, GPS Measurements of Near-Field Deformation along the Southern Dead Sea Fault System, J. of Geochemistry, Geophysics, Geosystems G3, (impact factor 2.1)12, no. 12, 1-17.
- Al-Amoush, H., Al-Tarazi, E., Abu Rajab, J., Al-Dwyeek, Y., Al-Atrash, M., Shudiefat, A., 2015, Geophysicl investigation using Time-Domain Electromagnetic method (TDEM) at Wadi Deir Al-Kahaf area/Jordan for groundwater artificial recharge purposes, J. Water & Resource & Protection, 7, 143-151.
- Hani Al-Amoush, Jafar Abu Rajab, Eid Al-Tarazi, Abdel Rahman Al-Shabeeb, Rida Al-Adamat, A'kif Al-Fugara, 2017, Electrical Resistivity Tomography Modeling of Vertical Lithological Contact using Different Electrode Configurations, Jordan Journal of Earth and Environmental Sciences JJEES, 1995-6681, 8, 1, 27-34, 2017.
- Hani Al-Amoush, Abdel Rahman Al-Shabeeb, Rida Al-Adamat, A'kif Al-Fugara, Saad Al Ayyash, Akram Shudeifat, Eid Al-Tarazi, Jafar Abu Rajab, The Use of GIS Techniques and Geophysical Investigation for Flood Management at Wadi Al-Mafraq Catchment Area, Jordan Journal of Earth and Environmental Sciences JJEES, 8, 2,97-103, 2017.
- Abu Rajab, S. Jafar and Al Tarazi, A. Eid, Illuminating and optimising a three-dimensional model of an oil shale seam and its volume distribution using the transient electromagnetic

induction method, central part of Jordan, Geophysical Prospecting J. (impact factor 1.5), 2018, 66, 603-625.

Fatima Ghanem, Hani Al Amoush, Eid Al-Tarazi, Geotechnical Engineering Evaluation of Superficial Deposits Utilizing Seismic Methods at Al Al-Bayt University, Jordan: Iraqi Geological Journal (IGJ), vol 54, 1D,11-28, 2021.

Fatima Ghanem, Hani Al Amoush, Eid Al-Tarazi, Geophysical Investigation of Superficial Deposits characterization at Al al-Bayt University as a Case Study. Accepted at the Indonesian Journal on Geosciences, 2022, ISSN Print: 2355-9314 ISSN Online: 2355-9306.

# 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. Current and Previous Research Activities (national & international funding):
- 1. Coordinator of MAPEC project aims to: Development for Master Program of Environmental Engineering and Climate Change at Jordan University. Master of Climate Change & Sustainability of Arid Land at Hashemite University, Master program of Environmental Engineering and Climate

Change at German-Jordanian University. Funded by Tempus grant # 516788-TEMPUS-1-2011-1-JO-TEMPUS-JPCR, 1,155,808.74 Euro, 2011-2014.

- 2. Member of the project entitled "Improving construction standards & practice in Jordan-training of trainers on seismic building assessment & retrofit design & remote quality management of structural assessment & retrofit design", by EQCO Ltd, for <u>UNDP Jordan</u>, project # 00079165, RFP 2012/4, 2011-2013, 150,000 JD's total budget.
- 3. Member of the Steering Committee of the Earth Sciences Studies related to the National <u>Nuclear Power Station (NNPP)</u> attended to establish in Jordan, 2011-2017, 3,000,000's JD total budget.
- 4. 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. , 200,000 \$ total budget.
- 5. 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, 130,000 JD's total budget.
- 6. 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, 150,000 \$ total budget.
- 7. Coordinator of the Hashemite university team of the project entitled: Biowaste and algae knowledge for the production of 2<sup>nd</sup> generation biofuels, together with scientists from Italy, Denmark, Sweden, Spain, Latvia, and India, funded by FP7, 2009-2013, 3,000,000 Euro total budget.
- 8. Coordinator of the project entitled:
  Development Services for a Regional Badia Development, UNDP, 2007,15,000
  \$ total budget.
- 9. Coordinator of the project entitled:
  Arid lands watershed evaluation and monitoring with Bio-solid application, with BRDC /Jordan and USAID, 2007, 35,000 \$ total budget.
- 10.Coordinator of the project "Seismic Hazard Assessment Study For Jordan utilizing GPS techniques", sponsored by both University of Missouri at Columbia, & NSF/USA, and the Hashemite University, Jordan, 2005-2013.
- 11. 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

12. 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, 200,000 JD's total budget.

13. 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, 18,000 JD's total budget.

- 6. Consultations: many consultations have been undertaken for governmental and private bodies in Jordan and abroad 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-Mafraq Governorates) 2005.
  - √ 2005-2022: Several consultations for Construction and designing companies regarding applying geophysical methods (Seismic, Resistivity ERT, TEM, & Georadar) of huge projects such as Al-Wehda dam, the proposed atomic nuclear station sites in Jordan, Kufranjah dam, Jordan refinery company, Wind Energy plant near Amman, Ma'an and Al-Taffila, and archeological sites among many others...
- 7. Supervising postgraduate students: since 1995 supervised more than 65 master and PhD thesis at the Hashemite University and all Governmental universities in Jordan.
- 8. MEMBERSHIP IN SCIENTIFIC SOCIETIES:

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Member - Jordanian Geological Association (JGA).
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Member - Jordanian Environmental Society (JES).

Member - American Geophysical Union (AGU).

Member - Seismological Society of America (SSA).

Member - American Association of Petroleum Geology (AAPG)