

CURRICULUM VITAE**Mousa Bani Baker**

BCs, MASc, PhD

Department of Civil and infrastructure Engineering/ Faculty of Engineering and Technology

Al-Zaytoonah University of Jordan, Amman, Jordan

Phone: +962-7777-99-291

Fax: 00962-6-4291432

E-mails: m.banibaker@zuj.edu.jo, mik25b@yahoo.com

Homepage: <http://www.zuj.edu.jo/portal/mousa-bani-baker/>

**Highlights**

- Expert and consultant in Geotechnical and Foundation Engineering
- Professional experience in ABET accreditation
- Professional experience in proposals writing and preparation
- Excellent skills in technical writing and communication skills in Arabic, English and basic French
- Experience in FIDIC contracts
- Budget preparation experience
- High level of ethical responsibility and professional attitude
- Expert in QS world universities ranking, ISO 9001/2015, and Q.A
- Published in top ISI-Q1 refereed journals (SCI and SCIE indexed) including ASCE's-JMCE and JHM
- High level of administrative skills and strategic planning
- Previous Senator and Governor (Montreal, Canada)
- Previous President of Concordia Graduate Students Association (Canada)
- Previous Vice President and co-founder of TRAC (Montreal, Canada)
- Previous acting Dean of Engineering, Vice Dean, and Department Head
- Graduate of the Dept of Building, Civil and Environmental Engineering, Concordia University, Number 1 program in Canada and 20th worldwide on Shanghai University Ranking

**1. Personal Data**

Year of Birth: 1976

Nationality: Jordanian - Canadian

2. Education

- Ph.D. (Civil Engineering/Geotechnical Engineering) 2010, Concordia University, Montreal, Quebec, Canada
- M.Sc. (Civil Engineering/Geotechnical Engineering) 2003, Concordia University, Montreal, Quebec, Canada
- B.Sc. (Civil Engineering) 2000, Jordan University of Science and Technology, Irbid, Jordan

3. Ph.D. Dissertation

The Effect of Alternative Fuels on the Performance of Sand-Bentonite Liners and the Application of Electro-Silicization Technology into Liners Rehabilitation, Concordia University, Quebec, Canada

4. Master Dissertation:

Passive Earth Pressure of Overconsolidated Cohesionless Backfill Overlaying Natural Deposit, Concordia University, Quebec, Canada

5. Employment**Academic Positions**

- Assistant Professor, Department of Civil and Infrastructure Engineering, Al-Zaytoonah University of Jordan, Amman, Jordan (2014-Now)
- Assistant Professor, Department of Civil Engineering, American University of Madaba, Madaba, Jordan (2013-2014)
- Assistant Professor, Department of Civil Engineering, Philadelphia University, Amman, Jordan (2012-2013)
- Assistant Professor, Department of Civil Engineering, Jerash University, Jerash, Jordan (2011-2012)
- Graduate Assistant (Teacher and Research Assistant) Department of Building, Civil and Environmental Engineering, Concordia University, Montreal, Quebec, Canada (2001-2003), (2005-2010)

Administrative Positions

- Vice Dean, Faculty of Engineering and Technology, Al-Zaytoonah University of Jordan, Amman, Jordan (2016-2017)
- Chairman of Civil and Infrastructure Engineering Department, Faculty of



QF09/0110 - 3.0E

Curriculum Vitae- Dr. Mousa Bani Baker

Engineering and Technology, Al-Zaytoonah University of Jordan, Amman, Jordan (Summer 2017)

- Chairman of Civil and Infrastructure Engineering Department, Faculty of Engineering and Technology, Al-Zaytoonah University of Jordan, Amman, Jordan (2014-2015)
- Chairman of Civil Engineering Department, Faculty of Engineering, Philadelphia University, Amman, Jordan (2012-2013)
- Acting Dean, Faculty of Engineering, Jerash University, Jerash, Jordan (Summer 2012)
- Chairman of Civil Engineering Department, Faculty of Engineering, Jerash University, Jerash, Jordan (2011-2012)

6. Research Interests

- The use of clays and rocks as construction materials
- Soil rehabilitation

7. Membership in Scientific Societies and Associations

- Member of the Jordanian Engineers Association, Amman, Jordan
- Candidate member of Professional Engineers of Ontario (Toronto, Canada) (Passed all exams and waiting for the certificate).

8. Honors and Awards

- PhD research work was funded from NSERC discovery grants awarded to my supervisors: Professor Maria Electrowicz and Professor Adel Hanna Montréal, Quebec, Canada, 2008-2010
- Teaching assistant awards, Concordia University, Montréal, Quebec, Canada, 2002, 2003, 2005, 2006, 2007, 2008
- Research assistant award, Concordia University, Montréal, Quebec, Canada 2005-2010
- Concordia Graduate Students Support Program Award 2005-2008
- Concordia Graduate Students Support Program Award 2001-2003

9. Fellowships and Scholarships

Royal Jordanian Military Scholarship 1995-2000



9. Teaching Experience

Undergraduate Courses

- Engineering Geology
- Geotechnical Engineering
- Foundation Engineering
- Advanced Soil Mechanics
- Concrete Technology
- Surveying Engineering
- Introduction to Civil Engineering
- Environmental Engineering
- Fluid Mechanics
- Statics
- Geotechnical Engineering Lab
- Surveying Lab
- Environmental Engineering Lab

10. Grants

- Improved Strength and Durability Resistance of Concrete Containing Steel Slag, 2015, Deanship of scientific research and higher studies, Al-Zaytoonah University of Jordan, Amman, Jordan (24,850 JD)
- Improved Strength and Durability Resistance of Concrete Mix Containing Jordanian Bentonite and Asphalt Containing Jordanian Bentonite, 2015, Deanship of scientific research and higher studies, Al-Zaytoonah University of Jordan, Amman, Jordan (13,700 JD)
- High Sound Isolation System, 2014, granted by KADDB and KAFD, Amman, Jordan (4000 JD)
- Circulation of Traffic at King Hussein Medical Center, 2016, granted by KADDB and KAFD, Amman, Jordan (2500 JD)
- Student graduation project, ZUJ-Faculty of Engineering and Technology, Amman, Jordan, 2018 (300 JD).

11. Membership of Committees

National and International

- Member of the organizing committee of the 8th International conference on Engineering, Project, and Product Management (EPPM 2017)
- Member of the scientific committee of the 8th International conference on Engineering, Project, and Product Management (EPPM 2017)
- Member of the organizing committee of Al-Zaytoonah University third International Conference on Environmental Design and Innovation (ZEC-2016)



QF09/0110 - 3.0E

Curriculum Vitae- Dr. Mousa Bani Baker

University

- Head of ABET Joint Accreditation Committee (JAC) Criterion 2 PEO's
- Member of ABET Department Accreditation Committee (DAC)
- Head of ABET Self Study Report (SSR) for criterion 2 SSR-PEO's
- Member of the SSR committee
- Head of the Industry-Department liaison committee- Responsible of the Industrial Advisory Board (IAB)
- Member of the QS world ranking committee at ZUJ 2017-Now
- Head of the Quality Assurance committee, Department of Civil and Infrastructure Engineering, Al-Zaytoonah University of Jordan 2016/2017
- Member of the ABET accreditation committee, Department of Civil and Infrastructure Engineering, Al-Zaytoonah University of Jordan 2016/2017
- Member of Al-Zaytoonah University Council 2015/2016
- Member of the faculty of engineering and technology council 2014/2015
- Faculty of Engineering ABET Committee AUM 2013/2014
- Member of research committee AUM 2013/2014
- Member of faculty of engineering board at Philadelphia University 2012/2013
- Member of research committee of Philadelphia University 2012/2013
- Member of Quality Assurance committee at Philadelphia University 2012/2013
- Member of the health and safety committee, Faculty of Engineering and Computer Science, Concordia University, Montreal, Quebec, Canada, 2006

12. Professional and Scientific Meetings

Scientific Meetings Organized

- Member of the scientific committee of the Second Modern Technical and vocational Education Workshop, Ma'an, Jordan (2018)



Participation in Scientific meetings and workshops

- Capstone Project Preparation (According to ABET criteria) Workshop, ZUJ, Amman , Jordan, 2018 (Presenter)
- The Seventh Jordanian International Civil Engineering Conference, Amman, Jordan, 2017
- Using and Managing e-Learning System Workshop, ZUJ, Amman, Jordan, 2017 (3 days)
- Arab student engineering training program, supervisor, ZUJ, summers of 2016 and 2017 (3 weeks/ year)
- Building and Analyzing Exams Workshop, ZUJ, Amman, Jordan, 2017 (3 days)
- 8th Traffic Safety Conference in Jordan, Innovations in Traffic Planning, Engineering and Safety, Amman, Jordan, 2017
- Modern Engineering Technology in Technical and Vocational Education Renewable Energy and Environmental Engineering, Workshop, Ma'an, Jordan, 2016
- FIDIC training workshop (instructor), ZUJ, 2016 (10 hrs.)
- Workshops in Modern Engineering Technology and its Application, Jerash, Jordan, 2015
- Armfield Seminar “Lab equipment and technology”, Amman, Jordan, 2015
- The Second Annual Symposium for Information Technology Students in Jordan SITS 2012
- 25th Eastern Canadian Symposium of the CAWQ on Water Pollution Research, October 30, 2009. Ottawa-Carleton Institute for Environmental Engineering Ottawa, Ontario, Canada
- Professional workshop on health and safety, Montreal, Canada (2 days)
- Professional workshop on law and ethics, Ottawa, Canada 2008 (3 days)
- Professional workshop on safety on construction sites, Montreal, Canada, 2003 (2 days)

13. Participation in organization of curricular and/or extra-curricular activities

- Head of the social, cultural and sport committee at the faculty of engineering and technology, Al-Zaytoonah University of Jordan 2017/2018
- Reviewer for several conferences and Journals, 2018
- Member of the MASC examining committee at the Department of Civil Engineering, JUST, Jordan, 2018
- Member of the consulting board of the National Jordanian Political Party 2016-now
- Head of the social committee at the department of civil and infrastructure engineering, Al-Zaytoonah University of Jordan 2015/2016



QF09/0110 - 3.0E

Curriculum Vitae- Dr. Mousa Bani Baker

- Member of the board of governors (Governor), Concordia University, Montreal, Canada, 2007/2008.
 - Member of the board of senates (Senator), Concordia University, Montreal, Canada, 2007/2008
 - President of Graduate Students Association (GSA), Concordia University, Montreal, Canada, 2007/2008
 - Vice president and co-founder of the Teacher and Research Assistants Union (TRAC), Concordia University, Montreal, Canada, 2005/2007
 - Member of the governing boards of North American Universities and Colleges 2007/2008
 - Member of steering committee of the search committee for the Dean of Engineering and Computer Science, Concordia University, Montreal, Canada, 2008
 - Member of the search committee for the Dean of Engineering and Computer Science, Concordia University, Montreal, Canada, 2008
 - Election poll clerk, Federal election of Canada, west mount, Montreal, Quebec, Canada, 2011
 - Student's representative, Department of Building, Civil and Environmental Engineering, Concordia University, Montreal, Canada, 2005
 - Canada Inc. Business and trade, Canada, 2004/2005
 - Rogers Canada, Canada, 2003/2004
 - German Technical for International Cooperation, Jordan, 2000/2001
14. Reviewer for many journals including Journal of Hazardous Materials, Journal of Advanced Science and Engineering Technology. And a reviewer for many international conferences.
15. Member of the editorial board of, Journal of Advanced Science and Engineering Technology.

16. Publications

- Papers in refereed journals
 1. **Bani Baker M.**, Elektorowicz M., Hanna A., Elctrokienetic Nondestructive In-situ Technique for Rehabilitation of Liners Damaged by Fuels, Journal of Hazardous Materials. Vol. 359 (2018) P: 510-515.
 2. **Bani Baker M.I.**, Abendeh R.M., Obaidat T.S., *Employing Natural Bentonite Clay as Partial Replacement of Mineral Filler in Asphalt Mixtures*, ASCE's Journal of Materials in Civil Engineering, (2018) Vol. 30 Issue 8. P: 1-8.
 3. Abendeh R., AbuSalem Z., **Bani Baker M.**, Khedaywi T., *Strength and Resistance to Freezing-Thawing Action of Concrete Containing*



- Waste Glass*, Proceedings of the Institution of Civil Engineers- Construction Materials, 2018. <https://doi.org/10.1680/jcoma.17.00065>
4. **Bani Baker M.**, *The Application of Marble and Granite as Building Materials in Jordan*, Jordan Journal of Civil Engineering. Vol. 11, no. 2, 2017, pages 234-238.
 5. Abu Salem Z., Khedawi T.S., **Bani Baker M.**, Abende R., *Effect of Waste Glass on Properties of Asphalt Concrete Mixtures*, Jordan Journal of Civil Engineering. Vol. 11, no. 1, 2017, pages 117-131.
 6. **Bani Baker M.**, Abende R., Abu Salem Z., Taisir S. Khedawi, *Production of Sustainable Asphalt mixes Using Recycled Polystyrene*. International Journal of Applied Environmental Sciences. Vol. 11, no. 1, 2016, pages 183-192.
 7. Abende R., Ramadan K., Haddad R., **Bani Baker M.**, *Freezing Thawing Resistance of Concrete Incorporating Glass Waste*, Journal of Materials Science Research. Vol. 4, no. 4, 2015, pages 19-25.
 8. **Bani Baker M.**, Elektorowicz M., Hanna A., Qasem A., *The Influence of Biofuels on the Permeability of Sand-Bentonite Liners*. International Journal of Environmental and Ecological Engineering. Vol. 6, no. 12, 2012, pages 804-807.

- Conference Presentations

1. **Bani Baker M.**, Abende R., *Using Hollow Concrete and Thermostone Blocks in Sound Isolation System*, Lecture Notes in Mechanical Engineering (Springer) 2018, Chapter 18, pages 171-177. Proceeding of the 8th International Conference on Engineering, Project, and Product Management (EPPM 2017).
2. Abende R., **Bani Baker M.**, Abu Salem Z., Ahmad H., *The Feasibility of Using Milled Glass Wastes in Concrete to Resist Freezing-Thawing Action*, International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering Vol:9, No:8, 2015, pages 981-984. Proceeding of the 17th International Conference on Civil and Construction Engineering, London, UK, 2015.
3. **Bani Baker M.**, Elektorowicz M., Hanna A., Abende R., Ayadat T., *Electrokinetic Nondestructive In-situ Technique for Rehabilitation of Damaged Liner*, The symposia on Electrokinetic Remediation EREM2017, August 2017, Montreal-Canada.
4. **Bani Baker M.**, Abende R., Abu Salem Z., Ahmad H., *The Engineering Properties of Jordanian Marble*, 17th International conference on Civil and Building Engineering, 2015, Montreal, Quebec, Canada.