HANAN SULIMAN AL-NIMRY

UNIVERSITY EDUCATION

PhD in Civil Engineering, University of Jordan (Jordan), 2002
MSc in Civil Engineering, Jordan University of Science and Technology (Jordan), 1990
BSc in Civil Engineering, Yarmouk University (Jordan), 1987

FIELDS OF INTEREST

Earthquake engineering; engineering seismology; structural testing and modeling; rehabilitation and retrofitting of structures; advanced composites; building codes.

PROFESSIONAL EXPERIENCE RECORD

2022 – to date	Dean of Engineering Jordan University of Science and Technology
2020 – 2022	Vice Dean of Engineering Jordan University of Science and Technology
2019 – to date	Professor of Civil Engineering/Structures Jordan University of Science and Technology
2014 – 2019	Assosiate Professor of Civil Engineering/Structures Jordan University of Science and Technology
2008 – 2014	Assistant Professor of Civil Engineering/Structures Jordan University of Science and Technology
2006 – 2008	Assistant Professor of Civil Engineering/Structures University of Jordan
1998 – 2006	Researcher/Senior Structural Engineer Building Research Center-Royal Scientific Society of Jordan
1991 – 1998	Senior Structural Engineer Private Sector

MAJOR PROFESSIONAL EXPERIENCE

Co-author of the first edition of the Jordanian Code for Earthquake-Resistant Buildings; Assessment of seismic risk in the city of Irbid-Jordan; Assessment of seismic vulnerability of buildings in Jordan; Mitigation of seismic risk in Jordan including Jordan seismic hazard mapping, microzonation of the city of Aqaba and assessment of the seismic vulnerability of typical residential stone-concrete buildings; Site survey, assessment and seismic retrofitting of a number of industrial structures in the city of Aqaba (Jordan) following the 1995 Aqaba Earthquake; Investigation into the use of silica sand in high performance concrete; Site survey and structural assessment of grain silos in Jordan; Structural design of new buildings; Structural assessment of existing buildings.

PUBLICATIONS

Al-Nimry H., Al-Rabadi R. *Axial-Flexural Interaction in FRP-Wrapped RC Columns*. International Journal of Concrete Structures and Materials 2019; doi 10.1186/s40069-019-0366-8.

Al-Nimry H., Neqresh M. *Confinement Effects of Unidirectional CFRP Sheets on Axial and Bending Capacities of Square RC Columns*. Engineering Structures 2019; 196: doi 10.1016/j.engstruct.2019.109329**.**

Al-Nimry H., Altous N. *Seismic Performance of Gravity Load-Designed RC Frame Buildings in Jordan: A Prelude into the Effect of Masonry Infills.* Proceedings of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium WMCAUS 2019, 17-21 June 2019, Prague-Czech Republic.

Al-Nimry H. *Development of Seismic Fragility Curves of RC Infilled Frame Buildings in Jordan.* Proceedings of the International Conference for Engineering Risk (INCER 2019), 3-5 April 2019, Beirut-Lebanon, MATEC Web of Conferences 281, 01012 (2019), https://doi.org/10.1051/matecconf/201928101012.

Al-Nimry H., Soman A. *Performance of FRP-Jacketed RC Columns under Axial-Flexural Loading*. Proceedings of the Sixth International Conference on Advances in Civil, Structural and Mechanical Engineering - CSM 2018, 28-29 April 2018, Zurich-Switzerland.

Al-Nimry H., Soman A. *On the Slenderness and FRP Confinement of Eccentrically-Loaded Circular RC Columns*. Engineering Structures 2018; 164C: 92-108**.**

Al-Nimry H., Al- Rabadi R. *Behavior of Eccentrically-Loaded Circular Reinforced Concrete Columns Strengthened with Carbon Fiber Reinforced Polymers*, Proceedings of the 20th International Conference on Composite Structures (ICCS20), 4-7 September 2017, Paris-France. Structural and Computational Mechanics Book Series, doi 10.15651/978-88-938-5041-4.

Al-Nimry H., Ghanem A. *FRP Confinement of Heat-Damaged Circular RC Columns,* International Journal of Concrete Structures and Materials 2017; 11(1): 115-133, doi 10.1007/s40069-016-0181-4.

Al-Nimry H., Jawarneh M. *Effects of Increased Slenderness in Short Heat-Damaged RC Columns Confined with FRP Composites*. Materials and Structures 2017; 50(1): 95, doi 10.1617/s11527-016-0965-7.

Al-Nimry H., Resheidat M., Qeran S. *Rapid Assessment for Seismic Vulnerability of Low and Medium Rise Infilled RC Frame Buildings,* Journal of Earthquake Engineering and Engineering Vibration 2015; 14(2): 275-293, doi 10.1007/s11803-015-0023-4.

Al-Nimry H., Mekhlafi G. *Estimation of Maximum Inelastic Displacement Demand for Dominant Residential Buildings in Jordan under Earthquake Excitation*, Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), August 2014, Istanbul-Turkey.

Al-Nimry H., Resheidat M., Al-Jamal M. *Ambient Vibration Testing of Low and Medium Rise Infilled RC Frame Buildings in Jordan*, Journal of Soil Dynamics and Earthquake Engineering 2014; 59(c): 21-29, doi 10.1016/j.soildyn.2014.01.002.

Al-Nimry H. *Quasi-Static Testing of RC Infilled Frames and Confined Stone-Concrete Bearing Walls*, Journal of Earthquake Engineering 2014; 18(1): 1-23, doi 10.1080/13632469.2013.835292.

Resheidat M., **Al-Nimry H.**, Al-Jamal M. *Modeling and Measuring the Fundamental Period of Vibration for Low to Medium Rise Residential Buildings in Jordan*, Journal of Advanced Sciences and Applied Engineering 2014; 1(1): 83-87.

Al-Nimry H., Haddad R., Afram S., Abdel-Halim M. *Effectiveness of Advanced Composites in Repairing Heat-Damaged RC Columns*. Materials and Structures 2013; 46(11): 1843-1860, doi 10.1617/s11527-013-0022-8.

Erdik M., Şeşetyan K., Demircioğlu M.B., Tüzün C., Giardini D., Mansouri B., Lodi S., **Al-Nimry H.**, Tseretelli N., Hovhannisyan G., Chrysostomou C., El-Khoury R., Helou R., *Seismic Risk Assessment in the Middle East and Caucasus: EMME (Earthquake Model of Middle East) Project*. Proceedings of the 15th World Conference on Earthquake Engineering (15 WCEE), 24-28 September 2012, Lisbon-Portugal, paper No. 2129.

Al-Nimry H. *Seismic Vulnerability of Residential Buildings in Jordan and its Locality*. Proceedings of the 15th World Conference on Earthquake Engineering (15 WCEE), 24-28 September 2012, Lisbon-Portugal, paper No. 5007.

Al-Nimry H., Haddad R., Afram S., Abdel-Halim M. *Repair of Heat-Damaged Reinforced Concrete Columns using Advanced Composite Materials.* Proceedings of the Fifth International Conference on Advanced Composites in Construction (ACIC 2011), 6-8 September 2011, Coventry-England, pp. 106-117.

Al-Nimry H. *Evaluation of Seismic Performance of Residential Stone-Concrete Buildings in Jordan*. Technical Report No. (CS/10/EQ.1), Royal Scientific Society of Jordan, April 2010.

Jiménez M., **Al-Nimry H.**, Khasawneh A., Al-Hadid T., Kahhaleh K. *Seismic Hazard Assessment for Jordan and Neighboring Areas*. Bollettino di Geofisica Teorica ed Applicata 2008; 49(1): 17-36.

Al-Nimry H. *Seismic Vulnerability of Residential Buildings in Jordan.* ESC 31st General Assembly, 7-12 September 2008, Crete-Greece.

Al-Nimry H. *Engineering Education and Research in Jordan, Case Study: the University of Jordan*. Proceedings of the Second North African Region Seminar on Engineering Education-NARSETE2, 12-14 November 2007, M'Sila-Algeria, CD Rom.

Jiménez M., **Al-Nimry H.,** Khasawneh A., Al-Hadid T., Kahhaleh Kh. *Assessment of Seismic Hazard in Jordan*. Proceedings of the First European Conference on

Earthquake Engineering and Seismology (1st ECEES), 3-8 September 2006, Geneva-Switzerland, CD Rom.

Khasawneh A., **Al-Nimry H.,** Al-Hadid T., Lacave C. *Ambient Vibration Measurements in Aqaba City-Jordan*. Proceedings of the First European Conference on Earthquake Engineering and Seismology (1st ECEES), 3-8 September 2006, Geneva-Switzerland, CD Rom.

Al-Nimry H., Al-Hadid T. *Seismic Repair and Strengthening of an Industrial Steel Structure in Aqaba, Jordan*. Proceedings of the Fourth Jordanian Civil Engineering Conference, 10-13 April 2006, Amman-Jordan, CD Rom.

Al-Nimry H., Al-Hadid T., Kahhaleh Kh. *The Jordanian Construction Practice: Deficiencies and Methods to Improve the Performance of Stone-Concrete Buildings*, Technical Report No. (CS/06/EQ.1). Royal Scientific Society of Jordan, February 2006.

Kahhaleh Kh., **Al-Nimry H.**, Batayneh I., Khasawneh A. *The Jordanian Code for Earthquake-Resistant Buildings*, 1st edition, Jordanian National Building Council, 2005.

Al-Nimry H., Kahhaleh Kh. *The Jordanian Code for Earthquake-Resistant Buildings*. Proceedings of the International Earthquake Engineering Conference (TINEE), 21-24 November 2005, Dead Sea-Jordan, CD Rom.

Jiménez M., **Al-Nimry H.**, Khasawneh A., Al-Hadid T., Kahhaleh Kh. *Jordan Seismic Hazard Mapping*. Proceedings of the International Earthquake Engineering Conference (TINEE), 21-24 November 2005, Dead Sea-Jordan, CD Rom.

Al-Nimry H. *Earthquake Disaster Management*. Journal of Civil Defense, 14th year (2005), Issue No. 52, pp. 46-48.

Al-Nimry H., Armouti N., Najmi A. *Inelastic Cyclic Response of Stone-Concrete Bearing Walls*. Journal of the International Association of Concrete Technology 2003; 1(2): 119-132.

Al-Nimry H., Armouti N., Najmi A. *Inelastic Cyclic Response of Stone-Concrete Bearing Walls*. Proceedings of the Sixth International Conference on Concrete Technology for Developing Countries, 21-24 October 2002, Vol. 3, pp. 961-972.

Armouti N., **Al-Nimry H.** *Seismic Response of Stone-Concrete Bearing Walls and Infilled Frames*. Technical Report (2002), Deanship of Scientific Research, University of Jordan, 246p.

Hunaiti Y., Abu Kabir M., **Nimry H**., *Torsional Strength of Partially-Encased Composite Beams*. Proceedings of the Second Jordanian Civil Engineering Conference JCEC2, November 1999, Amman-Jordan.

Nimry H., Batayneh M., Ashour T., Kahhaleh Kh. *Seismic Repair and Strengthening of the Reaction and Phosphoric Units at the Fertilizer Complex in Aqaba*. Technical Report No. (CS/98/EQ.7), Royal Scientific Society of Jordan, October 1999.

Resheidat M., **Nimry H.** *Structural Analysis of Plane Frames Considering Axial Constraints*. Journal of Structural Engineering 1997; 24(2): 75-82.

WEBSITES

http://www.just.edu.jo/eportfolio/Pages/Default.aspx?email=hsnimry

www.researhgate.net/profile/Hanan_Al-Nimry

https://scholar.google.com/citations?hl=en&user=01h8tv0AAAAJ&view_op=list_works&citsig=AMD79orZmgR4D-vioKMTKfuOL1ZH-vInxg&pli=1&authuser=1

https://loop.frontiersin.org/people/295847/overview

PROFESSIONAL ACTIVITIES

Review Editor: Editorial Board of Earthquake Engineering, a specialty of Frontiers in Built Environment. November 2015-present.

Reviewer for a number of international journals including: (https://publons.com/researcher/1076266/hanan-al-nimry/)

- Jordan Journal of Civil Engineering (ISSN: 1993-0461)
- Journal of Earthquake Engineering (Taylor & Francis ISSN: 1363-2469 (Print), 1559-808X (Online))
- Arabian Journal for Science and Engineering (Springer ISSN: 1319-8025 (Print), 2191-4281 (Online))
- Arabian Journal of Geosciences (Springer ISSN: 1866-7511 (Print), 1866-7538 (Online))
- Structures and Buildings (ICE publishing ISSN: 0965-0911, E-ISSN: 1751-7702)
- Earthquake Engineering and Engineering Vibration (Springer ISSN: 1671-3664)
- Structural Engineering and Mechanics, An International Journal (ISSN: 1225-4568 (Print), ISSN: 1598-6217(Online))
- Journal of Adhesion Science and Technology (Print ISSN: 0169-4243 Online ISSN: 1568-5616)
- Construction and Building Materials (Elsevier ISSN: 0950-0618)
- International Journal of Concrete Structures and Materials (ISSN: 2234-1315 electronic)
- Journal of Engineering Research **(**Print ISSN: 2307-1877, Online ISSN: 2307-1885**)**
- Natural Hazards and Earth System Sciences (Copernicus Publications ISSN: 1561-8633)
- Advances in Civil Engineering (ISSN: 1687-8086)
- Advances in Mechanical Engineering (E-ISSN: 16878140 | ISSN: 16878140)
- Computer Applications: An International Journal

- Computers and Concrete: An International Journal (ISSN: 1598-8198 (Print), ISSN: 1598-818X (Online))
- Earthquakes and Structures: An International Journal (ISSN: 2092-7614 (Print), ISSN: 2092-7622 (Online))
- Frontiers in Built Environment (Electronic ISSN**:** 2297-3362)
- Journal of Reinforced Plastics and Composites (E-ISSN: 15307964 | ISSN: 07316844)
- NED University Journal of Research (ISSN: 2304-716X)
- The Open Civil Engineering Journal (ISSN: 1874-1495)
- The Open Construction and Building Technology Journal (ISSN: 1874-8368)
- International Journal of Disaster Risk Reduction (ISSN: 22124209)

Consultant to the Accreditation and Quality Assurance Commission (AQAC), Palestinian Ministry of Education and Higher Education. August-December 2014.

Consultant to the Accreditation and Quality Assurance Commission (AQAC), Palestinian Ministry of Education and Higher Education. May 2015 – April 2016.

Reviewer of the "Conceptual Seismic Design Guidance for New Framed Infill Buildings". Draft document prepared by GeoHazards International and supported by Earthquake Engineering Research Institute (EERI) and Thornton Tomasetti Foundation, 2013.

Reviewer of the "Practical User Guidelines and Software for the Implementation of the H/V Ratio Technique: Measuring Conditions, Processing Method and Results Interpretation". Draft document prepared by SESAME (Site Effects Assessment using Ambient Excitations) European Project, 2004.

Participant in work packages WP4 (Seismic Risk) and WP5 (City Scenarios) within the international project EMME-Earthquake Model of the Middle East Region: Hazard, Risk Assessment, Economics and Mitigation, 2009-2013. Project website: http://www.emme-gem.org/

Participant of the Framed Infill Network, Earthquake Engineering Research Institute (EERI), 2011-to date.

Member of the advisory board for the SASPARM (Support Action for Strengthening Palestinian-administrated Areas capabilities for Seismic Risk Mitigation) project, 2012-2014. Project is funded by the European Commission-FP7. SASPARM is coordinated by An-Najah National University and supported by the European Centre for Training and Research in Earthquake Engineering (EUCENTRE) and the Institute for Advanced Study of Pavia (IUSS) in Italy. Project website: http://www.sasparm.ps/en/

Consultant to the United Nations Development Program (UNDP) in Jordan: Delivering a training course (Interpretation of Seismic Risk Assessment Data) within the context of the UNDP-SDC funded project "Seismic Risk Assessment for Aqaba Special Economic Zone", 12-14 July 2010, Aqaba-Jordan.

Consultant to the Royal Scientific Society of Jordan acting as a local reviewer and contributor to the UNDP-SDC funded project "Seismic Risk Assessment for Aqaba Special Economic Zone", 2010.

Consultant to the Royal Scientific Society of Jordan providing technical supervision of experimental and analytical investigations within the SDC-funded project "Mitigation of Seismic Risk in Jordan", 2006-2010.

Consultant to the Swiss Agency for Development and Cooperation (SDC): Delivering a series of lectures on "Conceptual Seismic Design of Buildings" to the civil engineering communities in Lebanon and Syria. Lectures presented at Beirut Arab University, American University of Beirut, ESIB St. Joseph University, Universite Saint-Esprit De Kaslik-USEK, Lebanese University (different sites) and at the Syrian Engineers Association in Damascus, May-October 2010, Lebanon, Syria.

Consultant to the United Nations Development Program (UNDP) in Jordan: Delivering a training course (Engineer Disaster Support Course) within the context of the UNDP–SDC funded project "Amman Disaster Risk Management Master Plan (DRMMP): Support to Building National Capacities for Earthquake Risk Reduction at Amman Municipality in Jordan", 21-22 January, 2009, Amman-Jordan.

Consultant to the Swiss Agency for Development and Cooperation (SDC): Delivering a series of lectures on the "Seismic Conceptual Design of Buildings" to the civil engineering community in Jordan, 2009, Jordan.

Member of the following technical committees working under the auspices of the Jordanian National Building Council-Ministry of Public Works and Housing:

- Building Codes-Technical Committee, 2010-2012.
- Jordanian Code for Repair of RC Bridges, October 2010-to date.
- Assessment of a proposed earthquake-resistant structural system, 2012.

Member of the following scientific and organizing committees:

- Scientific committee for the First International Conference on Optimization-Driven Architectural Design (OPTARCH 2019), 5-7 November 2019, Amman-Jordan. Conference website: http://www.just.edu.jo/OptArch2019/Pages/default.aspx
- Scientific committee for the International Conference for Engineering Risk (INCER 2019), 3-5 April 2019, Lebanese University, Beirut-Lebanon. Conference website: http://www.ulfg.ul.edu.lb/conferences/4/INCER-2019.
- Scientific and Organizing committees for the 14th Arab Structural Engineering Conference (ASEC), 12-15 April 2018, Jordan University of Science and Technology, Irbid-Jordan. Conference website: http://www.just.edu.jo/Conferences/asec/Pages/default.aspx.
- Organizing committee for the international conference: Coordinating Engineering for Sustainability and Resilience, CESARE'17, 3-8 May 2017, Dead Sea-Jordan. Conference website: http://www.just.edu.jo/cesare17/Pages/home.aspx.

- Organizing committee for the international conference: Civil Engineering for Sustainability and Resilience, CESARE'14, 24-27 April 2014, Amman-Jordan. Conference website: http://www.just.edu.jo/cesare14/Pages/home.aspx.
- Organizing committee for the Fifth International Civil Engineering Conference, Jordan Engineers Association, acted between March 2010 and February 2011.
- Scientific committee for the 2nd North African Region Seminar on Engineering and Technology Education-NARSET2, Mohamed Boudiaf University of Science and Technology, 14-16 November 2007, M'Sila-Algeria.
- Scientific and organizing committees for the International Earthquake Engineering Conference (TINEE), 21-24 November 2005, Dead Sea-Jordan.

Member of the European Seismological Commission (ESC) working group "Earthquake Risk Reduction in Built Cultural Heritage in the Mediterranean Basin". A joint working group with the European Association of Earthquake Engineering (EAEE), 2009.

Member of the committee formed to revise the Arabic translation and adaptation of the "Seismic Conceptual Design of Buildings: basic principles for engineers, architects, building owners, and authorities" by Hugo Bachmann. Book translated from the English version under the auspices of the Swiss Agency for Development and Cooperation (SDC) and in collaboration with the Jordan Engineers Association. Arabic version: No. 1772/6/2008.

Member of the Jordan Engineers Association (JEA), 1987 – to date.

Member of the Earthquake Engineering Research Institute (EERI), E-Affiliate 2017 – to date.

Member of the American Concrete Institute (ACI) 2017 – to date.