

Dr Kamran Vahdat

Educational Background

- PhD – Construction Management – University of Leeds, Leeds
- MSc – Structural Engineering – Mazandaran University of Science & Technology
- BSc – Civil Engineering – BAS (Bu-Ali Sina) University

General Background

Kamran Vahdat BSc, MSc, PhD, PEng is PhD specializing in critical infrastructure resilience and using artificial intelligence in multi-hazard risk models. He is currently working in the Institute for Resilient Infrastructure at University of Leeds developing different decision support models for infrastructure management. His latest research entails developing a multi-hazard decision support tools for infrastructure management; risk management of civil infrastructure system; and vulnerability assessment of spatially distributed network systems using MCDM, MODM and artificial Intelligence. He is a member of Association of Researchers in Construction Management (ARCOM) in UK.

Teaching Interest

- Construction Management
- Risk Management
- Retrofitting analysis of Infrastructure network system
- Decision Support systems and Optimization for Civil Engineering
- Infrastructure Management

Research Interest

Dr Vahdat expertise in broader areas of civil engineering, and his current research in risk assessment and management of civil infrastructure entail:

- Seismic risk assessment of buildings and civil infrastructure systems
- Seismic risk management (decision making, retrofitting, optimization)
- Risk-based decision making for infrastructure management
- Vulnerability assessment of spatially distributed assets (School buildings, Hospitals, power transmission network, water distribution network, etc.)

Publications

The following papers were produced to disseminate the concept and results of the work undertaken by the author during the course of this Ph.D research study.

1. Vahdat K; Smith NJ; Amiri GG (2015) *Seismic Risk Management: A system-based perspective*, **Journal of Risk Management**, doi:10.1057/rm.2015.3
2. Vahdat K; Smith NJ; Amiri GG (2014) *Fuzzy multicriteria for developing a risk management system in seismically prone areas*, **Journal of Socio-Economic Planning Sciences**, (48) 235 - 248
3. Vahdat K; Smith NJ (2014) *A risk-based system for managing the retrofitting of school buildings in seismic prone areas: A case study from Iran*. **International Journal of Risk Assessment and Management**, vol. 17, pp.311-331.
4. Vahdat K; Smith NJ; Amiri GG (2014) *Developing a Knowledge Based Expert System (KBES) for Seismic Risk Management*, **Proceedings of the second international conference on Vulnerability and risk analysis and management (ICVRAM)**, Liverpool UK, 1746-1755
5. Vahdat K; Smith NJ; Amiri GG (2014) *Seismic Risk Management: A system-based perspective*, **Proceedings of the second international conference on Vulnerability and risk analysis and management (ICVRAM)**, Liverpool UK, 2675-2684
6. Vahdat K; Smith NJ (2010) *A DSS framework for selecting projects in seismic areas*, Association of Researchers in Construction Management, **ARCOM 2010 - Proceedings of the 26th Annual Conference**, pp.1209-1218, 2010
7. Vahdat K; Smith NJ (2010) *Multidisciplinary Integrated Tools in Seismic Risk Management*, **CIB Conference**, University of Salford, UK