# Reyes Garcia

Civil Engineer (UMSNH), MSc (ROSE School), PhD (Sheffield)
Technical Consultant (Spain and Latin America)

## Profile

Reyes Garcia joined LimitState Ltd as Technical Consultant in 2012 with the aim of providing technical support on the use of LimitState software to practicing engineers in Spain and Latin America.

He is a civil engineer with special interest in geotechnical engineering, structural concrete and earthquake engineering. His PhD investigated the seismic strengthening of reinforced concrete buildings using innovative strengthening techniques.

## Education

- PhD, Civil and Structural Engineering, The University of Sheffield (UK), 2013.
- MSc, Earthquake Engineering and Engineering Seismology, ROSE School (Italy) and University "Joseph Fourier" of Grenoble (France), 2007.
- Civil Engineering degree (first class), University of Michoacan – UMSNH (Mexico), 2001.

## Appointments held

- Research Associate, Dept. of Civil & Structural Engineering, The University of Sheffield (UK), 2013-present.
- Project Engineer Coordinator of BANDIT full-scale shake table tests, 2009-2013.
- Technical Consultant, ADEPT Civil and Structural Consulting Engineers (Leeds, UK), 2011-2012.
- Design Engineer, CYMAP SA de CV (Morelia, Mexico), 2000-2005.

## Membership of learned societies & professional bodies

- Member of TG 9.3 "FRP Reinforcement for Concrete Structures", International Federation for Structural Concrete (fib).
- Member of COST Action TU1207 "Next Generation Guidelines for Composite Reinforcements".
- IStructE, UK (Graduate Member).
- Licensed Engineer (Mexico). Professional Licence No. 4101937
- Licensed Construction Technician (Mexico). Professional Licence No. 2415141.

## Selected Published Software

- LimitState:RING masonry arch analysis software (2010-present; translator).

## Selected Publications

- **Garcia, R.**, Hajirasouliha, I., Guadagnini, et al. (2014) "Full-scale shaking table tests on a substandard RC building repaired and strengthened with post-tensioned metal straps", *Journal of Earthquake Engineering*, 18(2), 187-213. DOI: 10.1080/13632469.2013.847874.
- **Garcia, R.**, Helal, Y., Pilakoutas, K., Guadagnini, M. (2014) "Bond behaviour of substandard splices in RC beams externally confined with CFRP", *Construction and Building Materials*, 50, 15 January 2014, 340-351. DOI: 10.1016/j.conbuildmat.2013.09.021
- **Garcia, R.**, Helal, Y., Pilakoutas, K., Guadagnini, M. (2013) "Bond strength of short lap splices in RC beams confined with steel stirrups or external CFRP", *Materials and Structures*, 1-17. DOI: 10.1617/s11527-013-0183-5.
- **Garcia, R.**, Jemaa, Y., Helal, Y., Guadagnini, M., Pilakoutas, K. (2013) "Seismic strengthening of severely damaged beam-column RC joints using CFRP", *Journal of Composites for Construction-ASCE*. DOI: 10.1061/(ASCE)CC.1943-5614.0000448.
- **Garcia, R.**, Hajirasouliha, I., Pilakoutas, K. (2010) "Seismic behaviour of deficient RC frames strengthened with CFRP composites", *Engineering Structures*, 32(10), 3075-3085, ISSN: 0141-0296. DOI: 10.1016/j.engstruct.2010.05.026.





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