



## Contact Information

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## Biography

Sadegh Etedali is currently an assistant professor in the Department of Civil Engineering, Birjand University of Technology. He received his PhD in Structural Engineering from University of Sistan and Baluchestan, Iran, in 2014. His PhD study focused on the smart materials and structures. Dr. Etedali has more than 7 years of experience in the field of active and passive vibration control of structures. He has published more than 60 scientific papers in journals, and proceedings at national and international levels. He supervised more than 10 M.Sc. students.

## Research Interests

- Smart materials and structures
- Structural control
- Passive isolation
- Structural dynamic
- Earthquake Engineering
- Soil -Structure Interaction
- Performance-based design
- Soft Computing
- Reliability of structures
- Structural optimization

## Teaching

**Graduate:** Earthquake Engineering, Static, Dynamics of Solids, Structural Analysis II, An Introduction to modeling and simulation,

**Postgraduate:** Structural Control, Dynamics of structures, Advanced Seismic Design of Structures, New Structures

## Some Recent Journal Publications

- 1) Keshtegar, B., **Etedali, S.** (2018). Nonlinear mathematical modeling and optimum design of tuned mass dampers using adaptive dynamic harmony search algorithm. *Structural Control and Health Monitoring*, 25(7), e2163.
- 2) **Etedali, S.**, Seifi, M., Akbari, M. (2018). A numerical study on optimal FTMD parameters considering soil-structure interaction effects. *Geomechanics and Engineering*, 16(5), 527-538.
- 3) Shahi, M., Sohrabi, M. R., **Etedali, S.** (2018). Seismic control of high-rise buildings equipped with ATMD including soil-structure interaction effects. *Journal of Earthquake and Tsunami*, 12(03), 1850010.
- 4) Shourestani, S.; Soltani F.; Ghasemi, M.; **Etedali, S.** (2017). SSI effects on seismic behavior of smart base-isolated structures. *Geomechanics and Engineering*, In Press.
- 5) Etedali, S., Zamani, A. A., Tavakoli, S. (2018). A GBMO-based PI<sup>2</sup>D<sup>μ</sup> controller for vibration mitigation of seismic-excited structures. *Automation in Construction*, 87, 1-12.
- 6) **Etedali, S.**; Mollayi, N. (2017). Cuckoo search-based least squares support vector machine models for optimum tuning of tuned mass dampers. *International Journal of Structural Stability and Dynamics*, In Press.
- 7) Zamani, A.A.; Tavakoli S.; **Etedali, S.**, Sadeghi, J. (2017). Adaptive fractional order fuzzy PID control of smart base-isolated structures equipped with magnetorheological dampers. *Journal of Intelligent Material Systems and Structures*, In Press.
- 8) **Etedali, S.** (2017). A new modified independent modal space control approach toward control of seismic-excited structures. *Bulletin of Earthquake Engineering*, Published online.
- 9) **Etedali S.**; Tavakoli S. (2017). PD/PID Controller Design for Seismic Control of High-Rise Buildings Using Multi-Objective Optimization: A Comparative Study with LQR Controller. *Journal of Earthquake and Tsunami*, Published online.
- 10) Zamani, A.A.; Tavakoli S.; **Etedali, S.** (2017). Fractional order PID control design for semi-active control of smart base-isolated structures: a multi-objective cuckoo search approach, *ISA Transactions*, 67: 222-232
- 11) Heidari A. H.; **Etedali S.**; Javaheri M. R. (2017). A hybrid LQR-PID control design for seismic control of buildings equipped with ATMD. *Frontiers of Structural and Civil Engineering*, Published online.
- 12) Zamani, A.A.; Tavakoli S.; **Etedali, S.** (2017). Control of piezoelectric friction dampers in smart base-isolated structures using self-tuning and adaptive fuzzy proportional-derivative controllers, *Journal of Intelligent Material Systems and Structures*, Published online.
- 13) Keshtegar B.; **Etedali S.** (2017). Novel mathematical models based on regression analysis scheme for optimum tuning of TMD parameters, *Modelling in Engineering*, 6 (4):59-75.
- 14) Keshtegar B.; **Etedali S.** (2017). Evaluating the Failure Probability of Rectangular Plates with Various Boundary Conditions, *Civil Engineering journal-Ferdowsi University of Mashhad*, In Press, In Persian.
- 15) **Etedali, S.**; Sohrabi, M.R.; Tavakoli S. (2016). Design of a decoupled PID controller via MOCS for seismic control of smart structures. *Earthquakes and Structures, An International Journal*. 10 (5):1067-1087.
- 16) **Etedali, S.**; Sohrabi, M.R.; Tavakoli S. (2013). Optimal PD/PID control of smart base isolated buildings equipped with piezoelectric friction dampers. *Earthquake Engineering and Engineering Vibration*, 11(1):39-54.

## Reviewing activities

- ✓ Mechanical Systems and Signal Processing
- ✓ Smart Materials and Structures
- ✓ Bulletin of Earthquake Engineering
- ✓ International Journal of Structural Stability and Dynamics
- ✓ Earthquake Engineering and Engineering Vibration
- ✓ Advances in Structural Engineering
- ✓ International Journal of Structural Engineering
- ✓ International Journal of Dynamics and Control
- ✓ Smart Materials and Structure