

Dr. Edmond V. Muho

My research focuses on the analysis and design of reinforced-concrete structures within the broader field of structural dynamics and earthquake engineering. I have authored more than 60 scientific publications, including more than 40 articles in peer-reviewed international journals, and have a Scopus h-index of 15. I received my Ph.D. in Civil Engineering from the University of Patras, Greece, in 2017. From 2018 to 2021, I served as a Postdoctoral Research Associate at the College of Civil Engineering, Tongji University, Shanghai, China. From 2021 to 2022, I was a collaborating teaching staff member at the Hellenic Open University, where I supervised M.Sc. students. During the same period, I worked as a senior structural engineer at Christie Sarrie & Partners S.A. in Heraklion, Greece, contributing to the design, assessment, and retrofitting of concrete, steel, and masonry structures, including hotels, bridges, and historic monuments. I subsequently served at the College of Civil Engineering, Tongji University, as an Associate Research Professor in 2023 and as an Associate Professor from 2024 to 2026. I currently serve as an Assistant Professor of Reinforced Concrete at the School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.



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1. Education

As of September 2026

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|-------------------|---|
| 09/2012 – 03/2017 | Doctor of Philosophy (Ph.D.) in Earthquake Engineering, Analysis and Design of Concrete Structures (University of Patras, Greece).
Ph.D. Dissertation: “Seismic design of plane reinforced concrete structures with modal strength reduction factors and different performance levels”
Advisor: Professor Dimitri E. Beskos |
| 09/2010 – 06/2012 | Master of Science (M.Sc.) in Seismic Design of Structures, University of Patras, Greece, 2012 |
| 09/2005 – 07/2010 | Diploma in Civil Engineering (5 years program)
University of Patras, Greece, 2010 |

2. Areas of Research

My research focuses on the Analysis and Design of Reinforced Concrete Structures within the broader field of Structural Dynamics – Earthquake Engineering. In particular, it addresses the Performance-Based Seismic Design of reinforced concrete structures, the Seismic Assessment and Retrofitting of Existing Structures, and Structural Reliability, Fragility and Seismic Risk.

Secondarily, my research work includes: Seismic Analysis and Design of Steel Structures; Dynamic Analysis of Pavements and Soil-Structure Interaction; Analysis of Masonry Structures; and Reliability Analysis in Geotechnical and Rock Engineering, including slope stability.

More recently, I have started research on 3D-Printed Concrete under Static and Dynamic Loads and on Structural Health Monitoring.

3. Publications & Research Work Recognition

PAPERS IN REFEREED INTERNATIONAL JOURNALS: (44 papers + 3 under review, with 514 citations and h=15 in Scopus and 631 citations with h=16 in Google Scholar)

- IJ-1. **Edmond V. Muho**, Niki D. Beskou (2018), "Dynamic response of an infinite beam resting on a Winkler foundation to a load moving on its surface with variable speed", *Soil Dynamics and Earthquake Engineering*, 109: 150-153, doi: <https://doi.org/10.1016/j.soildyn.2018.02.034>
- IJ-2. Niki D. Beskou, **Edmond V. Muho** (2018), "Dynamic response of a finite beam resting on a Winkler foundation to a load moving on its surface with variable speed", *Soil Dynamics and Earthquake Engineering*, 109: 222-226, doi: <https://doi.org/10.1016/j.soildyn.2018.02.033>
- IJ-3. **Edmond V. Muho** and N.D.Beskou (2018), "Authors' Reply to Discussion on 1) "Dynamic response of a finite beam resting on a Winkler foundation to a load moving on its surface with variable speed" by ND Beskou and MV Muho [*Soil Dyn. Earthq. Eng.* 109(2018), 222-226] and 2) "Dynamic response of an infinite beam resting on a Winkler foundation to a load moving on its surface with variable speed" by MV Muho and ND Beskou [*Soil Dyn. Earthq. Eng.* 109(2018), 150-153]", *Soil Dynamics and Earthquake Engineering*, 115: 936-937, doi: <https://doi.org/10.1016/j.soildyn.2018.07.010>
- IJ-4. **Edmond V. Muho**, George A. Papagiannopoulos and Dimitri E. Beskos (2019), "A seismic design method for reinforced concrete moment resisting frames using modal strength reduction factors", *Bulletin of Earthquake Engineering*, 17: 337-390, doi: <https://doi.org/10.1007/s10518-018-0436-3>
- IJ-5. **Edmond V. Muho** and Niki D. Beskou (2019), "Dynamic response of an isotropic elastic half-plane with shear modulus varying with depth to a load moving on its surface", *Transportation Geotechnics*, 20, 100248, doi: <https://doi.org/10.1016/j.trgeo.2019.100248>
- IJ-6. Mahdi Shadab Far, Nemat Hassani and **Edmond V. Muho** (2019), "Empirical expressions for the maximum induced strain on buried steel pipelines crossing strike-slip faults", *Soil Dynamics and Earthquake Engineering*, 116: 490-494, doi: <https://doi.org/10.1016/j.soildyn.2018.10.037>
- IJ-7. **Edmond V. Muho**, George A. Papagiannopoulos and Dimitri E. Beskos (2020), "Deformation dependent equivalent modal damping ratios for the performance-based seismic design of plane R/C structures", *Soil Dynamics and Earthquake Engineering*, 129, 105345, doi: <https://doi.org/10.1016/j.soildyn.2018.08.026>
- IJ-8. **Edmond V. Muho**, Jiang Qian and Dimitri E. Beskos (2020), "Modal behavior factors for the performance-based seismic design of R/C wall-frame dual systems and infilled-MRFs", *Soil Dynamics and Earthquake Engineering*, 129, 105572, doi: <https://doi.org/10.1016/j.soildyn.2019.02.016>
- IJ-9. Chao Pian, Jiang Qian, **Edmond V. Muho** and Dimitri E. Beskos (2020), "A hybrid force/displacement seismic design method for regular reinforced concrete moment resisting frames", *Soil Dynamics and Earthquake Engineering*, 129, 105360, doi: <https://doi.org/10.1016/j.soildyn.2018.09.002>
- IJ-10. Niki D. Beskou, **Edmond V. Muho** and Athanasios P. Chassiakos (2020), "Simplified models for determining the response of an isotropic, continuously nonhomogeneous half-plane to a moving load", *Acta Mechanica*, 231: 47-69, doi: <https://doi.org/10.1007/s00707-019-02512-w>
- IJ-11. Chao Pian, **Edmond V. Muho**, Guoyun Lu and Jiang Qian (2020), "Application of asymptotic expansion homogenization in vibration analysis of masonry structures using finite elements", *Mechanics Research Communications*, 104: 103481, doi: <https://doi.org/10.1016/j.mechrescom.2020.103481>
- IJ-12. Niki D. Beskou, **Edmond V. Muho** and Jiang Qian (2020), "Dynamic analysis of an elastic plate on a cross-anisotropic elastic half-space under a rectangular moving load", *Acta Mechanica*, 231: 4735-4759, doi: <https://doi.org/10.1007/s00707-020-02772-x>

- IJ-13. Shadabfar Mahdi, Huang H., Kordestani H., **Edmond V. Muho** (2020), "Probabilistic modeling of excavation-induced damage depth around rock-excavated tunnels", *Results in Engineering*, 5, 100075, doi: <https://doi.org/10.1016/j.rineng.2019.100075>
- IJ-14. **Edmond V. Muho** (2020), "Dynamic response of an elastic plate on a transversely isotropic viscoelastic half-space with variable with depth moduli to a rectangular moving load", *Soil Dynamics and Earthquake Engineering*, 139, 106330, doi: <https://doi.org/10.1016/j.soildyn.2020.106330>
- IJ-15. **Edmond V. Muho**, Jiang Qian, Dimitri E. Beskos (2020), "A direct displacement-based seismic design method using a MDOF equivalent system: Application to R/C framed structures", *Bulletin of Earthquake Engineering*, 18: 4157-4188, doi: <https://doi.org/10.1007/s10518-020-00857-5>
- IJ-16. Mahdi Shadabfar, H. Huang, Hadi Kordestani, **Edmond V. Muho** (2020), "Reliability analysis of slope stability considering the uncertainty in water table level", *ASCE-ASME Journal of Risk and Uncertainty Analysis, Part A: Civil Engineering*, 6(3), 04020025: 1-8, doi: <https://doi.org/10.1061/AJRUA.6.0001072>
- IJ-17. Mahdi Shadabfar, Cagri Gokdemir, **Edmond V. Muho** (2021), "Estimation of damage induced by single-hole rock blasting: a review on analytical, numerical, and experimental solutions", *Energies*, 14, 29, doi: <https://dx.doi.org/10.3390/en14010029>
- IJ-18. **Edmond V. Muho**, Chao Pian, Jiang Qian, Shadabfar Mahdi, Dimitri Beskos (2021), "Deformation Dependent Peak Floor Acceleration for the Performance Based Design of Non-Structural Elements Attached to R/C Structures", *Earthquake Spectra*, 37(2): 1035-1055, doi: <https://doi.org/10.1177/8755293020988015>
- IJ-19. **Edmond V. Muho**, Jiang Qian, Ying Zhou (2021), "Prediction of inelastic displacement profiles of R/C moment resisting frames", *Soil Dynamics and Earthquake Engineering*, 143, 106593, doi: <https://doi.org/10.1016/j.soildyn.2021.106593>
- IJ-20. **Edmond V. Muho**, I. P. Pegios, Y. Zhou, S. Papargyri-Beskou (2021), "Dynamic response of a gradient elastic half-space to a load moving on its surface with constant speed", *Acta Mechanica*, 232: 3159-3178, doi: <https://doi.org/10.1007/s00707-021-03003-7>
- IJ-21. Chao Pian, **Edmond V. Muho**, Jiang Qian and Dimitri E. Beskos (2022), "A Hybrid Force/Displacement Seismic Design Method for Reinforced Concrete Infilled-MRFs and Wall-Frame Dual Systems", *Journal of Earthquake Engineering*, 26(6): 2731-2753, doi: <https://doi.org/10.1080/13632469.2020.1785358>
- IJ-22. Nicos Kalapodis, **Edmond V. Muho**, Dimitri E. Beskos (2022), "Seismic design of plane steel MRFs, EBFs and CBFs by improved direct displacement-based design method", *Soil Dynamics and Earthquake Engineering*, 153, 107111, doi: <https://doi.org/10.1016/j.soildyn.2021.107111>
- IJ-23. Nicos Kalapodis, **Edmond V. Muho**, George A. Papagiannopoulos (2022), "Integration of peak seismic floor velocities and accelerations into the performance-based design of steel structures", *Soil Dynamics and Earthquake Engineering*, 154, 107160, doi: <https://doi.org/10.1016/j.soildyn.2022.107160>
- IJ-24. Niki D. Beskou, **Edmond V. Muho** (2022), "Microstructural effects on dynamic response of rigid and flexible pavements to moving load under plane strain", *Soil Dynamics and Earthquake Engineering*, 163, 107544, doi: <https://doi.org/10.1016/j.soildyn.2022.107544>
- IJ-25. Nicos Kalapodis, **Edmond V. Muho**, Jiang Qian, Ying Zhou (2023), "Assessment of seismic inelastic displacement profiles of steel MRFs by means of modal behavior factors", *Soil Dynamics and Earthquake Engineering*, 175, 108218, doi: <https://doi.org/10.1016/j.soildyn.2023.108218>
- IJ-26. Mohammad Ali Irandegani, Daxu Zhang, **Edmond V. Muho**, Mahdi Shadabfar (2023), "Cyclic Behavior of Eccentrically Loaded R/C Short Columns Strengthened with TRM under Different Damage States", *Soil Dynamics and Earthquake Engineering*, 175, 108246, doi: <https://doi.org/10.1016/j.soildyn.2023.108246>

- IJ-27. Niki D. Beskou, **Edmond V. Muho**, “Review on Dynamic Response of Road Pavements to Moving Vehicle Loads; Part 1: Rigid Pavements”, Soil Dynamics and Earthquake Engineering, 2023, 175 108249, doi: <https://doi.org/10.1016/j.soildyn.2023.108249>
- IJ-28. Niki D. Beskou, **Edmond V. Muho**, “Review on Dynamic Response of Road Pavements to Moving Vehicle Loads; Part 2 : Flexible Pavements”, Soil Dynamics and Earthquake Engineering, 2023, 175 108248, doi: <https://doi.org/10.1016/j.soildyn.2023.108248>
- IJ-29. **Edmond V. Muho**, Niki D. Beskou, “Review on dynamic analysis of road pavements under moving vehicles and plane strain conditions”, Journal of Road Engineering, 2024 4(1): 54-68 <https://doi.org/10.1016/j.jreng.2024.01.002>
- IJ-30. **Edmond V. Muho**, Niki D. Beskou (2025), “Models and methods for dynamic response of 3D flexible and rigid pavements to moving loads: A review by representative examples”, Journal of Road Engineering, <https://doi.org/10.1016/j.jreng.2024.07.003>
- IJ-31. **Edmond V. Muho**, Nicos Kalapodis, Dimitri E. Beskos (2024), “Multi-Modal and Multi-Level Structure-specific Spectral Intensity Measures for Seismic Evaluation of Reinforced Concrete Frames”, Bulletin of Earthquake Engineering, 22: 6955-6989, <https://doi.org/10.1007/s10518-024-02009-5>
- IJ-32. Nicos Kalapodis, **Edmond V. Muho**, Dimitri E. Beskos (2025), “Structure-specific multi-modal and multi-level scalar intensity measures for steel plane frames”, Soil Dynamics and Earthquake Engineering, 190, 109185, <https://doi.org/10.1016/j.soildyn.2024.109185>
- IJ-33. **Edmond V. Muho**, Nicos Kalapodis, George A. Papagiannopoulos, Dimitri E. Beskos (2024), “The MDOF equivalent linear system and its applications in seismic analysis and design of framed structures”, Resilient Cities and Structures, 3(4):107-125, <https://doi.org/10.1016/j.rcns.2024.11.003>
- IJ-34. Qingyuan Gong, **Edmond V. Muho**, Niki D. Beskou, Ying Zhou (2025), “Approximate analytical/numerical solutions for the seismic response of rigid walls retaining a transversely isotropic poroelastic soil”, Advances in Engineering Software, 202, 103876, <https://doi.org/10.1016/j.advengsoft.2025.103876>
- IJ-35. Zhenyu Liu, Niki D. Beskou, **Edmond V. Muho**, Ying Zhou (2025), “Use of simplified models for estimating the dynamic response of a cross-anisotropic poroelastic half-plane to a load moving on its surface”, Applied Mathematical Modelling, 143, 115998, <https://doi.org/10.1016/j.apm.2025.115998>
- IJ-36. Qingyuan Gong, **Edmond V. Muho**, Niki D. Beskou, Ying Zhou (2025), “Dynamic analysis of rigid cantilever wall retaining linear elastic granular soil with microstructure under time harmonic seismic motion”, Acta Mechanica, 236, 3337-3357, <https://doi.org/10.1007/s00707-025-04327-4>
- IJ-37. Zhenyu Liu, Niki D. Beskou, **Edmond V. Muho**, Ying Zhou (2025), “Dynamic analysis of an elastic plate on a fissured poroelastic half-plane under a moving load”, Meccanica, 60:2947-2968, <https://doi.org/10.1007/s11012-025-02037-8>
- IJ-38. Qingyuan Gong, **Edmond V. Muho**, Niki D. Beskou, Ying Zhou (2025), “Rigid wall retaining a saturated fissured poroelastic rock layer over rigid bedrock under earthquake forces”, Applied Mathematical Modelling, 150B: 116377, <https://doi.org/10.1016/j.apm.2025.116377>
- IJ-39. Nicos Kalapodis, **Edmond V. Muho**, Mahdi Shadabfar, George Kamaris (2025), Quantifying the Impact of Soil-Structure Interaction on Performance-Based Seismic Design of Steel Moment-Resisting Frame Buildings, Buildings, 15(20): 3741, <https://doi.org/10.3390/buildings15203741>
- IJ-40. D. A. Makhloof, **Edmond V. Muho**, Dimitri E. Beskos, Ying Zhou, A. R. Ibrahim (2026), Probabilistic Analysis and Fragility Quantification of RC Containment Structures under Seismic Excitations Using the Probability Density Evolution Method, Soil Dynamics and Earthquake Engineering, 204: 110216, <https://doi.org/10.1016/j.soildyn.2026.110216>

- IJ-41. D. A. Makhloof, **Edmond V. Muho**, Dimitri E. Beskos, Ying Zhou, A. R. Ibrahim (2026), *A Practical Probabilistic Finite Element-Based Design Framework for Reinforced Concrete Plate and Shell Structures*, Journal of Building Engineering, 126, 116221, <https://doi.org/10.1016/j.jobe.2026.116221>
- IJ-42. Christos P. Kougkoulos, **Edmond V. Muho**, Nicos A. Kalapodis, Dimitri E. Beskos (2026), *“Seismic retrofitting of pilotis RC buildings using steel buckling-restrained braces: Influence of brace inclination angle on performance”*, Journal of Earthquake Engineering, 2026, <https://doi.org/10.1080/13632469.2026.2702400>
- IJ-43. Niki D. Beskou, **Edmond V. Muho** (2025), *“Incorporation of cross-anisotropy and viscoelasticity in Odemark’s method for static analysis of flexible pavements”*, Journal of Road Engineering, (Accepted)
- IJ-44. Niki D. Beskou, **Edmond V. Muho** (2026), *“Flexible pavements under moving loads: Comparison of 2D and 3D models and very efficient 3D response predictions from 2D ones”*, Journal of Road Engineering, (Accepted)
- IJ-45. Chao Pian, **Edmond V. Muho**, Jiang Qian, Dimitri Beskos (2025), *Seismic response of reinforced concrete building structures experiencing viscous damper failure: analytical and numerical study*, Earthquake Engineering and Engineering Vibration, (Under Review)
- IJ-46. Nicos Kalapodis, **Edmond V. Muho**, Dimitri E. Beskos (2026), *“The impact of soil-structure interaction on the hybrid force-displacement seismic design method for steel moment-resisting frames”*, Soil Dynamics and Earthquake Engineering, (Under Review)
- IJ-47. D. A. Makhloof, **Edmond V. Muho**, Nicos Kalapodis, Dimitri E. Beskos, A. R. Ibrahim (2026), *“Stochastic Seismic Analysis and Reliability Assessment of RC Singly Curved Shell Structures”*, Structures (Under Review)

PAPERS IN REFEREED CONFERENCE PROCEEDINGS (22 papers):

- IC-1. **Edmond V. Muho**, George A. Papagiannopoulos, Jiang Qian, Dimitri E. Beskos, *“A performance-based seismic design method for RC/MRFs using modal strength reduction factors”*, International Workshop on Performance-Based Seismic Design of Structures, D. Beskos, Y. Zhou, J. Qian, X. Lu, Editors, Tongji University, Shanghai, China, 2017, 13-15 October
- IC-2. **Edmond V. Muho**, Niki D. Beskou, *“Dynamic response of an infinite beam resting on a winkler foundation to a load moving on its surface with variable speed”*, 9th GRACM International Congress on Computational Mechanics, Chania, 4-6 June 2018
- IC-3. **Edmond V. Muho**, G. A. Papagiannopoulos and Dimitri E. Beskos, *“A performance-based seismic design method for RC/MRFs using modal strength reduction factors”*, 9th GRACM International Congress on Computational Mechanics, Chania, 4-6 June 2018
- IC-4. Chao Pian, **Edmond V. Muho**, Jiang Qian, Dimitri E. Beskos, *“A Hybrid Force/Displacement Seismic Design Method for Regular Reinforced Concrete Moment Resisting Frames”*, 4th Huixian International Forum on Earthquake Engineering for Young Researchers, Tongji University, Shanghai, China, 21-22 August 2018
- IC-5. Chao Pian, **Edmond V. Muho**, Jiang Qian, Dimitri E. Beskos, *“A performance-based hybrid force-displacement seismic design method for reinforced concrete structure”*, COMPDYN 2019 7th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering M. Papadrakakis, M. Fragiadakis (eds.), Crete, Greece, 24–26 June 2019
- IC-6. **Edmond V. Muho**, Niki D. Beskou, Jiang Qian, *“An exact solution for the problem of a load moving on the surface of an isotropic half-plane with shear modulus varying with depth”*, 12th HSTAM International Congress on Mechanics, Thessaloniki, Greece, 22 – 25 September 2019
- IC-7. Niki D. Beskou, **Edmond V. Muho**, Jiang Qian, *“An analytical solution for the problem of a rectangular load moving on the surface of an elastic plate resting on a cross-anisotropic elastic half-space”*, 12th HSTAM International Congress on Mechanics, Thessaloniki, Greece, 22 – 25 September 2019

- IC-8. **Edmond V. Muho**, Dimitri E. Beskos, Jiang Qian, *"A direct displacement-based seismic design method using a MDOF equivalent system"*, 17th World Conference on Earthquake Engineering, 17WCEE Sendai, Japan, 13 - 18 September 2020
- IC-9. K. Yao, Jiang Qian, **Edmond V. Muho**, *"Shaking Table Test of an Isolated UHV Capacitor Structure with FPS Bearings"*, 17th World Conference on Earthquake Engineering, 17WCEE Sendai, Japan, 13 - 18 September 2020
- IC-10. **Edmond V. Muho**, Chao Pian, Jiang Qian, Dimitri Beskos, *"Deformation dependent peak floor acceleration for the performance based design of non-structural elements"*, FIB2020 Concrete structures for resilient society, Shanghai, 22-24 November 2020
- IC-11. Niki D. Beskou, **Edmond V. Muho**, *"Analytical/numerical solutions to the problem of the dynamic response of an elastic plate on a continuously non-homogeneous cross-anisotropic viscoelastic soil to a moving load"*, COMPDYN 2021, 8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering M. Papadrakakis, M. Fragiadakis (eds.) Streamed from Athens, Greece, 27–30 June 2021
- IC-12. Niki D. Beskou, **Edmond V. Muho**, *"A load moving on an elastic plate resting on a cross-anisotropic elastic half-space"*, 10th GRACM, International Conference in the field of Computational Mechanics. July 5-7, 2021, VIRTUAL CONGRESS
- IC-13. **Edmond V. Muho**, Niki D. Beskou, *"A load moving on an elastic plate resting on a continuously nonhomogeneous cross-anisotropic viscoelastic half-space"*, 10th GRACM, International Conference in the field of Computational Mechanics. July 5-7, 2021, VIRTUAL CONGRESS
- IC-14. Nicos A. Kalapodis, **Edmond V. Muho**, Dimitri Beskos, *"Seismic design of steel frames by improved direct displacement-based design method"*, STESSA 2022, The 10th International Conference on the Behaviour of Steel Structures in Seismic Areas, Timisoara, Romania, 25-27 May 2022
- IC-15. **Edmond V. Muho**, Niki D. Beskou, *"Dynamic response of an elastic plate on a gradient elastic half-plane to a moving load"*, 13th HSTAM International Congress on Mechanics, Patras, Greece, 24 – 27 August 2022
- IC-16. Niki D. Beskou, **Edmond V. Muho**, *"Dynamic response of an elastic plate on a transversely isotropic, damped and nonhomogeneous half-plane to a moving load"*, 13th HSTAM International Congress on Mechanics, Patras, Greece, 24 – 27 August 2022
- IC-17. Nicos Kalapodis, **Edmond V. Muho**, Dimitri Beskos, *"Use of mdof equivalent system for seismic design of plane steel frames by direct displacement-based method"*, 13th HSTAM International Congress on Mechanics, Patras, Greece, 24 – 27 August 2022
- IC-18. Nicos Kalapodis, Dionisios Serras, **Edmond V. Muho**, *"First yield inter-storey drift ratios of steel plane frames in the context of the direct displacement-based design method"*, 13th HSTAM International Congress on Mechanics, Patras, Greece, 24 – 27 August 2022
- IC-19. **Edmond V. Muho**, Niki D. Beskou, *"Accuracy of 2-D models for dynamic response of flexible pavements to moving loads"*, 8th International Conference Bituminous Mixtures and Pavements (8th ICONFBMP), Thessaloniki, Greece, 12-14 June 2024.
- IC-20. Niki D. Beskou, **Edmond V. Muho**, *"Simplified Analytical/Numerical Models for Dynamic Response of Cross-Anisotropic Poroelastic Media: Applications to Retaining Walls and Pavements"*, CompDyn 2025, Rodon, Greece, 15 – 17 July 2025
- IC-21. Nicos Kalapodis, **Edmond V. Muho**, Dimitri. E. Beskos, *"Novel Scalar Seismic Intensity Measures for Assessing the Performance of Steel and Reinforced Concrete Structures"*, CompDyn 2025, Rodon, Greece, 15 – 17 July 2025
- IC-22. Shafayat Bin Ali, George S. Kamaris, **Edmond V. Muho**, George Papagiannopoulos, *"Calibration of hysteretic models for seismic simulation of stainless steel beams"*, CompDyn 2025, Rodon, Greece, 15 – 17 July 2025

In local referee journals (1 paper):

- LJ-1. Chao Pian, Jiang Qian, **Edmond V. Muho** and Dimitri E. Beskos "Research on global and local ductility relationships for concrete frame structure", J . Huazhong University of Science and Technology, (Natural Science Edition), 2018, 46(7), doi: [10.13245/j.hust.180701](https://doi.org/10.13245/j.hust.180701) (in Chinese)

In refereed national conference proceedings (3 papers):

- LC-1. Michaela V. Vasileiadi, Stefanos I. Dritsos, **Edmond V. Muho**, "Investigation of the influence of diaphragms on structures made of load-bearing masonry according to the plan of K.A.D.E.T.", 18^o Panhellenic Concrete Conference, Athens, Greece, March 2018 (in Greek)
- LC-2. Diego Alejandro Valarezo Tandazo, George S. Kamaris, **Edmond Muho**, Nicos A. Kalapodis, Calibration of hysteretic models for seismic simulation of stainless steel beams, 11th Hellenic National Conference on Metal Structures, Thessaloniki, 9-10 October 2026.
- LC-3. Nicos A. Kalapodis, Christos P. Kougkoulos, **Edmond V. Muho**, Dimitri E. Beskos, Influence of brace inclination on brb retrofits of pilotis rc buildings, 11th Hellenic National Conference on Metal Structures, Thessaloniki, 9-10 October 2026.

4. Reviewer of International Journals

Reviewer for several international peer-reviewed journals. Selected journals include:

1. Soil Dynamics and Earthquake Engineering (Elsevier)
2. Engineering Structures (Elsevier)
3. Journal of Building Engineering (Elsevier)
4. Structures (Elsevier)
5. Earthquake Engineering and Engineering Vibration (Springer)
6. The Structural Design of Tall and Special Buildings (Wiley)
7. Advances in Engineering Software (Elsevier)
8. International Journal of Pavement Research and Technology (Springer)
9. Journal of Road Engineering (Elsevier)
10. Journal of Vibration Engineering & Technologies (Springer)
11. Journal of Asian Architecture and Building Engineering (Taylor & Francis)

5. Invited Speaker

4th Huixian International Forum on Earthquake Engineering for Young Researchers on: "Advanced Materials and Technology for Applications to Steel and Composite Steel/Concrete Structures", Tongji University, Shanghai, China, 21-22 August 2018

6. Distinctions, Academic Awards & Fellowships

1. Research Funding for three years by 2023 Shanghai Leading Talents (Overseas) (2023).
2. Awarded the Seal of Excellence Certificate from MSCA (Marie Skłodowska-Curie Actions) Individual Fellowships for my research proposal on high-rise disaster-resilient wind tower. (2021).

3. Recognized for outstanding performance during post-doc studies at the Department of Disaster Mitigation for Structures, Tongji University, Shanghai, China (2021).
4. Research Funding for two years from the Postdoctoral Science Foundation of China (2019).
5. Research Funding for one year from the Department of Disaster Mitigation for Structures, Tongji University, China (2020)
6. Recognized as Outstanding Reviewer for Soil Dynamics and Earthquake Engineering journal of Elsevier (2018).

7. Teaching, Supervising & Educational Activities

1. Assistant Professor of Reinforced Concrete, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece (2026–present)
2. Associate Professor, Tongji University, Shanghai, China (2024-2026)
3. Associate Research Professor, Tongji University, Shanghai, China (2023)
4. Collaborating Teaching Staff in Hellenic Open University of Patras (2021-2022)
5. Research Fellow on the laboratory of Structural Technology and Applied Mechanics in Hellenic Open University (2021)
6. Postdoctoral Research Associate at College of Civil Engineering, Tongji University, Shanghai, China (2018-2021)
7. Assistant Supervisor of PhD students, Department of Civil Engineering, Tongji University, Shanghai, China, (2018-2021)
8. Teaching Assistant in “Design of Reinforced Concrete Structural Elements” course, Department of Civil Engineering, University of Patras, (2015-2017)
9. Teaching Assistant in “Design of Steel Structures I, II” courses, Department of Civil Engineering, University of Patras, (2013-2015)
10. Presentation of SAP2000 Structural Software in the framework of the design steel structures courses, Department of Civil Engineering, University of Patras, (2013-2017)
11. Delivered selected lectures in the graduate course “Advanced Theory of Concrete Structures,” College of Civil Engineering, Tongji University, Shanghai, China (2024).
12. Instructor for the undergraduate course “Calculus II,” College of Civil Engineering, Tongji University, Shanghai, China (2024-2026)

8. Practical Experience

2021 – present Consulting Structural Engineer – structural design, seismic assessment and strengthening of existing reinforced concrete and masonry buildings.

2021 – 2022 Senior Structural Engineer, Christie Sarrie & Partners S.A., Heraklion, Greece – seismic design of new structures and seismic assessment and strengthening of existing reinforced concrete and masonry structures.

Some representative completed projects are the following:

- Seismic Assessment and Retrofitting of two 5-star Hotels in Heraklion, Greece
- Design of a new 3-Storey Reinforced Concrete of a Cultural Center at Rogdia, Crete, Greece

- Seismic Assessment and Retrofitting of an Existing Masonry Building in the Vrouhas Village, Lasithi (Crete), for Supporting Two New Reinforced Concrete Extension Floors

9. Spoken Languages

- English: Advanced Level Certificate in English (ALCE™), Hellenic American University
- Greek: Native
- Albanian: Native
- Chinese: Beginner

10. Computer Skills

Structural packages:	SAP2000, ETABS, Robot Structural Analysis, OpenSees, ABAQUS, RUAUMOKO 2D & 3D, ANSYS, TOLL-RAF
Technical Computing:	Matlab, NumPy (Python), Wolfram Mathematica
Programming Languages:	Python, Java, C++, C#, Fortran
Other:	Keras (Python deep learning library), Blender (3D data visualization), Linux (Operating system), LATEX (Typesetting system), Unity (Real-time 3D development platform)
Analysis Experience:	Advanced finite element analysis, Non-linear modelling of concrete and steel, Collapse analysis, Seismic hazard and seismic fragility analysis

11. Postgraduate Courses Taken

- Seismic Design of Reinforced Concrete Buildings
- Advanced Materials and Seismic Retrofit Technologies
- Earthquake Engineering and Earthquake Resistant Structures
- Retrofitting of Existing Structures
- Experimental Methods in Earthquake Engineering
- Dynamic Analysis of Structures by the Finite Element Method
- Seismic Design of Steel Structures
- Engineering Seismology and the Earthquake Response of Structures
- Systems for Seismic Protection of Structures
- Geotechnical Earthquake Engineering
- Soil Dynamics
- Stochastic Dynamics of Structures
- Deep Supported Excavations/Deep Foundations
- Advanced Mechanics of Structures

12. Postgraduate Research Supervision

1. Zhenyu Liu, Tongji University (2023–2025) – M.Sc. thesis co-supervision with Professor Dimitri E. Beskos on the dynamic response of poroelastic media under moving loads; thesis successfully completed.
2. Qingyuan Gong, Tongji University (2023–2025) – M.Sc. thesis co-supervision with Professor Dimitri E. Beskos on the seismic response of retaining structures and poroelastic soils; thesis successfully completed.
3. Diego Alejandro Valarezo Tandazo, Tongji University (2023–present) – Ph.D. thesis co-supervision with Professor Dimitri E. Beskos on the seismic design of concrete structures considering soil–structure interaction (SSI); ongoing.
4. Konstantinos Papadopoulos, “Design and Modeling Optimization of High-Rise Composite Wind Towers”. Hellenic Open University, Patras, Greece, (2021-2022)
5. Christos P. Kougkoulos “Retrofitting of existing piloti type reinforced concrete buildings with buckling restrained braces (BRB) and their layout effect”. Hellenic Open University, Patras, Greece, (2020-2021)
6. Georgia Chaska “Influence of the layout and the mechanical properties of infill walls on the behavior factor of reinforced concrete buildings”. Hellenic Open University, Patras, Greece, (2020-2021)
7. Maro Karageorgiou “Automated quality management tools in the construction industry – Building Information Modeling”. Hellenic Open University, Patras, Greece, (2020-2021)
8. Stefanos Foukas “Effects and methods of prevention and restriction of extreme natural disastrous phenomena. Case study of Mediterranean cyclone named “Ianos”. Hellenic Open University, Patras, Greece, (2020-2021)

13. Referees

1. Dimitri E. Beskos, Chair Professor, College of Civil Engineering, Tongji University, Shanghai, China and Emeritus Professor, University of Patras, Greece, email: dimisof@hotmail.com
2. Jiang Qian, Professor, Department of Disaster Mitigation for Structures, College of Civil Engineering, Tongji University, Shanghai, China, email: jqian@tongji.edu.cn
3. Ying Zhou, Professor, Director of the Division of Planning and Academic Development at Tongji University, Shanghai, China email: yingzhou@tongji.edu.cn