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<https://www.uni-weimar.de/de/bau-und-umwelt/professuren/nhsr/news/>

## Highlights

- **Carl Zeiss Stiftung biennial grant, 120,000 euros**, <https://www.carl-zeiss-stiftung.de/themen-projekte/uebersicht-projekte/detail/professur-fuer-natural-hazards-and-structural-resilience>
- **Teaching innovation award for Experimental seismic assessment of steel members** (2,500euros award, MSc in Natural Hazards and Risk Engineering, Bauhaus University)
- **German Research Foundation (DFG) reviewer**
- **Best presentation award**, 11<sup>th</sup> International Conference on Structural Health Monitoring of Intelligent Infrastructure, Concordia University, 8-12 August 2022.
- **Guest talk on multi-hazard engineering, Structural Engineering Channel, Engineering Management Institute (USA)**, [https://engineeringmanagementinstitute.org/tsec-65-performance-based-multi-hazard-design-of-buildings/?fbclid=IwAR3yZEMpulPE9-fnnP31proITuB-V5pt8vJ6R8jDigei\\_mnR6JMmIINWVTM](https://engineeringmanagementinstitute.org/tsec-65-performance-based-multi-hazard-design-of-buildings/?fbclid=IwAR3yZEMpulPE9-fnnP31proITuB-V5pt8vJ6R8jDigei_mnR6JMmIINWVTM)
- **Invited chairperson** at: 9<sup>th</sup> International Colloquium on Bluff Body Aerodynamics and Applications (Birmingham, UK, 29 Jul-2 Aug 2024), 8<sup>th</sup> European and African Conference on Wind Engineering (8EACWE, Bucharest, Romania, 20-23 Sept 2022), and **session moderator** for the conference Building a Resilient Infrastructure (Addis Ababa, Ethiopia 26 Feb – 2 Mar 2024)
- **Invited short lectures** at York University (2024), DPRI Kyoto University (2017), University of Southampton (2020), the University of Northern British Columbia (2021), Edinburgh Napier University (2021), University of South Wales (2019), Addis Ababa University (2024)
- **Horizon scholarship for international researchers offered by Concordia University (2019-2021)**
- **Expert in the field of Dynamics of Structures with Applications to Earthquake Engineering**, ‘Cultore della materia’, Department of Civil Engineering and Architecture, University of Catania, November 2013
- **ACM-W Microsoft scholarship** by Microsoft Research Advanced Technology Labs Europe to attend GECCO: Genetic and Evolutionary Computing Conference, 6-10 July 2013, Amsterdam, Netherlands
- **Outstanding reviewer of Soil Dynamics and Earthquake Engineering (2017)** and reviewer of *Earthquake Spectra*, *Structures*, *Journal of Wind Engineering and Industrial Aerodynamics*, *Bulleting of Earthquake Engineering*, *Journal of Structural Engineering (ASCE)* and *Structures*, 2025 ASEE Annual Conference & Exposition - Women in Engineering Division (WIED)
- **Scholar advisor for the Civil Engineering Association of Concordia University** (American Society of Civil Engineers – ASCE Concordia Student Chapter) and of **the Earthquake Engineering Research Institute Chapter at Concordia University (EERIC)**
- **State Scholarship Foundation for outstanding academic performance (2002-2008)**, Greek Ministry of Education recipient (I.K.Y.)
- **Graduate Seminar in University Teaching**, Centre for Teaching and Learning at Concordia University

## Experience

- Assistant Professor in Natural Hazards and Structural Resilience** **July 2023-today**  
Institute of Structural Engineering, Bauhaus University Weimar
- Research associate** **Aug 2022-Jun 2023**  
*Development of spinal braced frames and an adapted multihazard assessment framework*, supervisors: Profs L. Tirca and T. Stathopoulos, BCEE, Concordia University
- Postdoctoral research fellow** **Apr 2016-Jul 2022**  
*Multi-hazard design framework and resilience assessment of steel buildings of different occupancies*, supervisors: Profs L. Tirca and T. Stathopoulos, BCEE, Concordia University, Oct 2019 – Jul 2022  
*Dynamic effects on buildings with base isolation and energy dissipation, including wind and earthquake loads*, supervisors: Profs L. Tirca and T. Stathopoulos, BCEE, Concordia University, May 2018 – Jan 2019  
*Seismic isolation and energy dissipation in the earthquake resistant design of buildings: modelling, analysis, testing, identification and monitoring*, supervisor: Prof. G. Oliveto, DICAR, University of Catania, Apr 2016 – Apr 2018
- Research project D.P.C- ReLUIS 2014-2018, Line 6: Isolation and energy dissipation**  
component of the research unit at the University of Catania
- PhD student** **Jan 2013 - Mar 2016**  
Department of Civil Engineering and Architecture (DICAR), University of Catania  
Dissertation: ‘*Dynamic identification of the Augusta hybrid base isolated building using data from full scale push and sudden release tests*’, supervisor: Prof. G. Oliveto
- Visiting PhD scholar** **Jan - May 2015**  
University at Buffalo, New York
- Teaching Assistant and exam committee member** **Nov 2013 - Oct 2016**  
Class: *Dynamics of structures with applications to earthquake engineering*, Master in Structural and Geotechnical Engineering, DICAR, University of Catania
- Research Assistant** **Mar 2010 - Dec 2012**  
*Seismic Retrofitting of Buildings using Isolation and/or Energy Dissipation Techniques: Design, Modelling, Identification*, supervisor: Prof. G. Oliveto, DICAR, University of Catania
- Postgraduate Specialization Program (MEng)** **Sept 2008 - Nov 2009**  
Earthquake Engineering and Seismic Design of Structures (ASTE), *ECTS ‘A’ (2<sup>nd</sup> student graduate)*,  
School of Engineering, Aristotle University of Thessaloniki, Greece
- Bachelor and general Master’s Degree (BEng, MEng)** **Sept 2002 - Apr 2008**  
Structural/Civil Engineering, *ECTS ‘A’ (1<sup>st</sup> student graduate)*,  
School of Engineering, Aristotle University of Thessaloniki, Greece

## Teaching

- Classes (Master in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar)**
- **Experimental seismic assessment of steel members – Teaching Innovation Award** (semesters 2,4)
  - Applied structural dynamics (semester 1)
  - Primary hazards and risks (semester 1, Part II: Wind Engineering)
  - Assessment of structural performance under extreme loading conditions (semester 3, Part II: Base isolation)
  - Bauhaus Summer School: NextGen Engineers 2024 – Advanced Training Courses for a Sustainable Tomorrow, 19-30 August 2024

**PhD Supervisor**

Panchal A (Jun-Nov 2024) *Performance-based design of tall RC buildings sited in combined seismic and wind environment*. Incoming visiting PhD scholar from the Indian Institute of Technology Gandhinagar.

**MSc Thesis Supervisor**

Ullah A (ongoing) *Performance-based design and assessment of steel Moment Resisting Frames under recurring winds and earthquakes*, Master thesis in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar

Recinos Garcias RB (ongoing) *Performance assessment of split X-braced frame steel buildings, built on high seismicity zone and designed as per the Eurocode*, Master thesis in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar

Zeleeuw EA (ongoing) *Soil-structure interaction during earthquake loading: shaking table tests and numerical modelling*, Master thesis in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar

Dakour M (2022, ass. supervisor) *Multihazard analysis of low- and mid-rise steel buildings designed following the Canadian regulations*, Master thesis in Structural Engineering, BCEE, Concordia University

Chen L, and Wang S (2022, ass. supervisor) *Design and dynamic response analysis of steel strongback braced frames*, Master thesis in Structural Engineering, BCEE, Concordia University

Marino G (2015, ass. supervisor) *Dynamic response analysis of a residential building isolated at the base* (in Italian), Master thesis in Structural and Geotechnical Engineering, DICAR, University of Catania

Di Grande M (2014, ass. supervisor) *Vulnerability analysis and retrofitting of a school gymnasium* (in Italian), Master thesis in Structural and Geotechnical Engineering, DICAR, University of Catania

**Special Project Supervisor (Master in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar)**

Ullah A and Islam S (2023) *Multi-hazard performance assessment of a 20-story MRF steel building*

Bimrew MA (2024) *Quasi-static cyclic testing of steel braces for seismic applications*

Mall M (2024) *Wind design considerations for buildings sited in various seismic zones in India*

Fuertes Fuentes EA (2024) *Low-cost seismic base isolation systems using recycled materials*

**Publications – journal papers**

1. Athanasίου A, Tirca L, Stathopoulos T (2024) *Directional alongwind and crosswind effects on the performance of a 15-storey steel braced frame building in seismic environment*. Journal of Wind Engineering and Industrial Aerodynamics, 251:105790, <https://doi.org/10.1016/j.jweia.2024.105790>
2. Athanasίου A, Tirca L, Stathopoulos T (2023) *Performance-based wind and earthquake design framework for tall steel buildings with ductile detailing*. Journal of Wind Engineering and Industrial Aerodynamics, 240:105492, Special Issue “Wind intersections: extreme climate, resilience, and energy”, <https://doi.org/10.1016/j.jweia.2023.105492>
3. Kitayama S, Morales E, Athanasίου A (2023) *Inspection and repair considerations for downtime assessment of seismically isolated buildings*. Soil Dynamics and Earthquake Engineering, 164 (2023) 107618, <https://doi.org/10.1016/j.soildyn.2022.107618>
4. Athanasίου A, Tirca L, Stathopoulos T (2022) *Nonlinear wind and earthquake loads on tall steel braced frame buildings*. ASCE Journal of Structural Engineering, 148(8): 04022098, <https://ascelibrary.org/doi/10.1061/%28ASCE%29ST.1943-541X.0003375>
5. Athanasίου A, Dakour M, Pejmanfar S, Tirca L, Stathopoulos T (2022) *Multihazard performance-based assessment framework for multi-story steel buildings*. ASCE Journal of Structural Engineering, 148(6): 04022054, <https://ascelibrary.org/doi/full/10.1061/%28ASCE%29ST.1943-541X.0003331>

6. Athanasίου A, Oliveto N D, Ponzo F (2020) *Identification of first and second order models for the superstructure of a base-isolated building using free vibration tests*. Soil Dynamics and Earthquake Engineering, 135:106178, <https://doi.org/10.1016/j.soildyn.2020.106178>
7. Athanasίου A, Stathopoulos T, Tirca L (2020) *Discussion paper on Performance-Based Wind-Resistant Optimization Design for Tall Building Structures by Deng et al (2019)*. ASCE Journal of Structural Engineering, 146(8), <https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29ST.1943-541X.0002754>
8. Oliveto ND, Athanasίου A (2019) *2D dynamic and earthquake response analysis of base isolation systems using a convex optimization framework*. Annals of Solid and Structural Mechanics, 11, p. 11–24. <https://doi.org/10.1007/s12356-019-00053-4>
9. Oliveto ND, Markou AA, Athanasίου A (2019) *Modeling of high damping rubber bearings under bidirectional shear loading*. Soil Dynamics and Earthquake Engineering, Special Issue Base Isolation in the Southern EU: Current Status and Research Issues, 118, p. 179-190, <https://doi.org/10.1016/j.soildyn.2018.12.017>
10. Athanasίου A, Oliveto G, Ponzo F (2018) *Baseline correction of digital accelerograms from field testing of a seismically isolated building*. Earthquake Spectra, 34 (2), p. 915-939, <https://journals.sagepub.com/doi/10.1193/022817EQS040M>
11. Markou A A, Oliveto G, Athanasίου A (2016) *Response simulation of hybrid base isolation systems under earthquake excitation*. Soil Dynamics and Earthquake Engineering, 84, p. 120-133, <https://doi.org/10.1016/j.soildyn.2016.02.003>
12. Oliveto G, Oliveto ND, Athanasίου A (2014) *Constrained optimization for 1-D dynamic and earthquake response analysis of hybrid base-isolation systems*. Soil Dynamics and Earthquake Engineering, 67, p. 44-53, <https://doi.org/10.1016/j.soildyn.2014.08.010>
13. Oliveto G, Athanasίου A, Oliveto ND (2012) *Analytical earthquake response of 1D hybrid base isolation systems*. Soil Dynamics and Earthquake Engineering, 43, p. 1-15, <https://doi.org/10.1016/j.soildyn.2012.05.021>

#### Publications – engineering and academic magazines

14. Athanasίου A (2021) *Trends in engineering – why is everyone talking about performance based multihazard design?* Insights article, STRUCTURE, <https://www.structuremag.org/article/trends-in-engineering/>
15. Athanasίου A (2021) *Too little, too late? The devastating consequences of natural disasters must inform building codes*, The Conversation, <https://theconversation.com/too-little-too-late-the-devastating-consequences-of-natural-disasters-must-inform-building-codes-157032>

#### Publications – book chapters

16. Dakour M, Athanasίου A, Tirca L, Stathopoulos T (2024) *Inelastic seismic behaviour of torsionally sensitive steel braced frame buildings*, 10EWICS proceedings, Springer
17. Athanasίου A, Dakour M, Tirca L, Stathopoulos T (2023) *Wind hazard on earthquake damaged buildings*, Proceedings in Civil Engineering, ce/papers, 6(3-4):2394-2399, Ernst&Sohn, Wiley
18. Serras D N, Athanasίου A (2022) *Performance Assessment of a steel wind turbine tower subjected to repeated earthquakes*. In: Mazzolani, F.M., Dubina, D., Stratan, A. (eds) Proceedings of the 10<sup>th</sup> International Conference on Behaviour of Steel Structures in Seismic Areas. STESSA 2022. Lecture Notes in Civil Engineering, vol 262. Springer, Cham
19. Chen L, Wang S, Athanasίου A, Tirca L (2022). *Feasibility of Strongback System in Storey Mechanism Mitigation of Steel Braced Frames*. In: Mazzolani, F.M., Dubina, D., Stratan, A. (eds) Proceedings of the 10<sup>th</sup> International Conference on Behaviour of Steel Structures in Seismic Areas. STESSA 2022. Lecture Notes in Civil Engineering, vol 262. Springer, Cham

20. Markou A A, Oliveto N D, Athanasίου A (2017) *Modeling of high damping rubber bearings*, Chapter 7, 25 pages, Sextos AG, Manolis GD (eds). *Dynamic Response of Infrastructure to Environmentally-Induced Loads: Analysis, Measurements, Testing and Design*, Springer, Cham, Switzerland
21. Pehlivan M, Athanasίου A, Pasupuleti VDK (2014) *Seismic action plan for historical city center of Lisbon, 'Lisbon in Motion Workshop'*, Chapter 7, Costa A, Ferreira M, Carvalho A, Oliveira C, Lopes I, Gomes RC(eds). SPES:Sociedade Portuguesa de Engenharia Sismica, p.71-90, ISBN:978-989-20-5085-0
22. Athanasίου A, De Felice M, Oliveto G, Oliveto P S (2013) *Dynamical modeling and parameter identification of seismic isolation systems by Evolution Strategies*. In: Madani K, Dourado A, Rosa A, Filipe J (eds). *Studies in Computational Intelligence*, vol 465. Springer, Berlin, Heidelberg
23. Oliveto G, Athanasίου A (2012) *Upper and lower bounds for the parameter vector in dynamic identification of hybrid base isolation systems. Lezioni dai terremoti: Fonti di Vulnerabilità, Nuove Strategie Progettuali, Sviluppi Normativi*, a cura di Raffaele Nudo (editor). Firenze University Press, Florence, p. 247-256, ISBN: 978-88-6655-069-3

### Publications – selected conference proceedings

24. Islam S, Allah U, Athanasίου A (2024) *Nonlinear performance of a 20-story steel building under recurring seismic and wind loads*. 3NCWE: 3<sup>rd</sup> National Conference on Wind Engineering, September 11-13, Bucharest, Roumania (**best presentation award 'Constantin Iamandi' to Asad Ullah**)
25. Athanasίου A, Tirca L, Stathopoulos T (2024) *Scaling wind loads for Incremental Dynamic Analysis applications*. BBAA IX: 9<sup>th</sup> International Colloquium on Bluff Body Aerodynamics and Applications, University of Birmingham, Birmingham, UK
26. Athanasίου A (2024) *Inelastic response of bilinear sdof systems under strong wind and earthquake excitation*. 18WCEE: 18<sup>th</sup> World Conference on Earthquake Engineering, June 30-July 5, Milan, Italy
27. Dakour M, Tirca L, Athanasίου A, Stathopoulos T (2024) *Assessment of collapse safety of torsionally sensitive steel buildings under biaxial excitation*. 18WCEE: 18<sup>th</sup> World Conference on Earthquake Engineering, June 30-July 5, Milan, Italy
28. Athanasίου A, Tirca L, Stathopoulos T (2023) *The acrosswind effect on the performance-based assessment of tall steel buildings in multi-hazard environment*. ICWE16: 16<sup>th</sup> International Conference on Wind Engineering, August 27-31, Florence, Italy
29. Athanasίου A, Tirca L, Stathopoulos T (2020) *Dynamic response of inelastic fixed-base and base-isolated steel structures under wind and earthquake*. 17WCEE: 17<sup>th</sup> World Conference on Earthquake Engineering, September 27-October 2, Sendai, Japan
30. Athanasίου A, Tirca L, Stathopoulos T (2019) *Wind and earthquake effects on the nonlinear response of steel braced frame buildings*. 12CCEE: 12<sup>th</sup> Canadian Conference on Earthquake Engineering, June 17-20, Château Frontenac, Québec, Canada
31. Athanasίου A, Stathopoulos T, Tirca L (2019) *Preliminary multi-hazard assessment of mid-rise buildings*. Proceedings of the 27<sup>th</sup> CANCAM, May 27-30, Sherbrooke, Québec, Canada
32. Athanasίου A, Oliveto G (2018). *Superstructure mode identification in a base isolated building from push and sudden release tests*. 16ECEE: 16<sup>th</sup> European Conference on Earthquake Engineering, June 18-21, Thessaloniki, Greece
33. Athanasίου A, Oliveto G (2017) *Observations from full scale push and sudden release tests on a RC building seismically isolated at the base*. 1<sup>st</sup> Japan-Greece International Workshop by Young Researchers on Advanced Materials and Technology for Applications to Steel and Composite Steel/Concrete Structures, December 7-8, DPRI Kyoto University, Japan

34. Athanasiou A, Oliveto G (2017) *Correction of acceleration records obtained from free vibration tests on base isolated buildings*. 16WCEE: 16<sup>th</sup> World Conference on Earthquake Engineering, January 9-13, Santiago, Chile
35. Oliveto G, Athanasiou A, Markou AA, Marino G, Oliveto ND (2017) *System identification and response simulation of reinforced concrete buildings seismically retrofitted by base isolation*. 16WCEE: 16<sup>th</sup> World Conference on Earthquake Engineering, January 9-13, Santiago, Chile
36. Oliveto G, Athanasiou A (2014) *Simulation of the response of a hybrid base-isolated building during push and quick-release tests*. 2ECEES: 2<sup>nd</sup> European Conference on Earthquake Engineering and Seismology, August 25-29, Istanbul, Turkey
37. Oliveto G, Athanasiou A (2013) *Mixed Lagrangian Formulation for the dynamic response of base isolated buildings to earthquake excitation*. AIMETA 2013 - XXI Congresso Nazionale dell'Associazione Italiana di Meccanica Teorica e Applicata, September 17-20, Torino, Italy
38. Athanasiou A, Oliveto G, Takayama M, Morita K (2013) *Problems in the identification of base isolation systems from earthquake records*. GECCO'13 Companion. Copyright 2013 ACM 978-1-4503-1964-5/13/07, July. 6-10, Amsterdam, Netherlands
39. Oliveto G, Athanasiou A, Granata M (2013) *Blind simulation of full scale free vibration tests on a three story base isolated building*. 10CUEE: 10<sup>th</sup> International Conference on Urban Earthquake Engineering, March 1-2, Tokyo Institute of Technology, Japan, p. 1303-1316
40. Athanasiou A, Oliveto G (2011). *Modelling hybrid base isolation systems for free vibration simulations*. 8CUEE: 8<sup>th</sup> International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, March 7-8, Japan, p. 1293-1302

### Technical reports

Project: D.P.C- ReLUIIS 2014-2018, Line 6: Isolation and energy dissipation  
 Coordinators: Ponzo FC, Serino G  
 Authors: Oliveto G, Athanasiou A, Marino G, Granata M, Markou A, Oliveto ND  
 Reports: *Modeling of high damping rubber bearings under bidirectional shear loading* (2018),  
*Displacement demand of symmetric double concave curved sliders* (2018),  
*Displacement demand of the Solarino buildings* (2018)  
*On the seismic retrofitting of the Solarino buildings* (2016)

### Memberships

- American Society of Civil Engineers, ASCE
- American Association for Wind Engineering, ASEE
- American Society for Engineering Education, ASEE
- Canadian Association for Earthquake Engineering and Seismology
- Canadian Association of Postdoctoral Scholars / l'Association Canadienne des Stagiaires Postdoctoraux
- Society for Earthquake and Civil Engineering Dynamics, SECED
- Earthquake Engineering Research Institute, EERI
- ACM association for Women in Computing, ACM-W
- Order of Engineers of Quebec, Canada
- Technical Chamber of Greece, TEE (2008-2017)

### Computer skills

MATLAB, OpenSees, SAP2000, ETABS, LaTeX, AutoCAD, SeismoSignal, MS Office

## Language skills

Greek (native speaker), English (C2), Italian (C1), **French (B2-C1)**, German (A1)

## Volunteering (2020-2023, Montreal, Qc)

- Cooking and serving food, distributing clothes at the Resilience shelter and wellness center
- Math tutor for adult college students, Frontier College: a national charitable literacy organization