## **Chair of Structural Mechanics & Monitoring**

Institute of Structural Engineering (IBK) Department of Civil, Environmental and Geomatic Engineering (D-BAUG)

Swiss Federal Institute of Technology (ETHZ)

HIL E 33.3, Stefano-Franscini-Platz 5 CH-8093 Zürich, Switzerland chatzi@ibk.baug.ethz.ch Tel. +41 44 633 6755 www.chatzi.ibk.ethz.ch



PERSONAL INFORMATION

Date of birth: 18.11.1981 (Athens, Greece) Name: Eleni Chatzi Nationality: Greek Google Scholar: https://scholar.google.com/citations?user=2n9Mwt8AAAAJ&hl=en orcid.org/0000-0002-6870-240X ORCiD: **EDUCATION** 2010 Doctor of Philosophy (Ph.D.), Civil Engineering & Engineering Mechanics, Columbia University 2008 Master of Philosophy (M.Phil), Civil Engineering & Engineering Mechanics, Columbia University 2006 Master of Science (M.Sc.), Civil Engineering, National Technical University of Athens (NTUA) 2004 Diploma Degree, Civil Engineering of the National Technical University of Athens (NTUA) EMPLOYMENT HISTORY INCLUDING CURRENT POSITIONS<sup>1</sup> 2017-ETH Zürich, Institute of Structural Engineering, Associate Professor - Chair of Structural Mechanics *Teaching* in the Civil Engineering Section: Theory of Structures (BSc) □ Finite Element methods I (MSc) □ Finite Element methods II (MSc) 

Identification methods for Structural Systems (MSc) 

Non Destructive Evaluation & Rehabilitation of Existing Structures Research in the field of Data-driven Assessment of Engineered Systems with special interests in: Identification and Control of Nonlinear Structural Systems 

Structural Health Monitoring, Life Cycle Assessment, and Damage Detection 

Smart Sensor Technology, Smart Materials and Structures 2010-2017 ETH Zürich, Inst. of Structural Engineering, Assistant Professor - Chair of Structural Mechanics INSTITUTIONAL RESPONSIBILITIES since  $20\overline{20}$ D-BAUG Department Delegate, ETH Zurich since 2012 Member of numerous ETH Committees and Bodies, including Competence Center for Materials and Processes (MaP), ETH Mobility Initiative, Energy Science Center, Partnership Council for Sustainable Construction, ETH-Women Professors Forum (ETH-WPF) SELECTED APPROVED RESEARCH PROJECTS

- Future Resilient Systems Module Leader of Dynamic Mobile Sensing Platform & Principal Investigator of Automated Hazard Detection for Social Resilience
- SNSF Bridge Discovery project AeroSense: a novel MEMS-based surface pressure and acoustic IoT measurement system for wind turbines, collaboration with HSR
- H2020-SC5-2018-2019-2020, SC5-17-2018 RIA Grant, RISE: Real-time Earthquake Risk Reduction for a Resilient Europe, Swiss PIs: S. Wiemer, E. Chatzi, B. Stojadinovic
- ITN Training Network, H2020-MSCA-ITN-2018, INSPIRE: Innovative Ground Interface Concepts for Structure Protection, Swiss PIs: Prof. E. Chatzi, Prof. B. Stoiadinovic
- ETH Mobility Initiative Grant, On board Monitoring for Integrated Systems Understanding & Management Improvement in Railways (OMISM), in collaboration with Prof. Corman and the SBB
- ERC Proof of Concept (PoC) Grant, ERC-2018-PoC WINDMIL RT-DT, An autonomous Real-Time Decision Tree framework for monitoring and diagnostics on wind turbines
- ETH Research Grant, Forschungsgesuch ETH-11 18-1, "Enabling Dynamic Earthquake Risk Assessment (DynaRisk)", planned start date: 01.10.2018

<sup>1</sup>full CV and publication list found in: https:/<u>/ethz.ch/content/dam/ethz/special-interest/baug/ibk/structural-mechanics-</u> dam/people/chatzi/Chatzi CV.pdf

full publication list: https://ethz.ch/content/dam/ethz/special-interest/baug/ibk/structural-mechanicsdam/people/chatzi/publications list.pdf

- *H2020-MG-2016-2017 Grant*, FORESEE, Future proofing strategies FOr RESilient transport networks against Extreme Events, MG-7-1-2017 RIA, Swiss PI: Prof B. Adey, E. Chatzi
- *H2020-MSCA-IF-2017 Grant*, SiMAero, Simulation-Driven and On-line Condition Monitoring with Applications to Aerospace, Proposal ID: 795917 Call, Postdoctoral Fellow: Dr. Konstantinos Agathos
- *ITN Training Network*, MSCA-ITN-2017, DyVirt: Dynamic virtualisation: modelling performance of Eng. Structures
- ERC Starting Grant #679843 WINDMIL "Smart Monitoring, Inspection and Life-Cycle Assessment of WTs"

### SUPERVISION OF JUNIOR RESEARCHERS

<b>PhD:</b> M. Miah, defended in 2015 □ J.P. Escallón, defended in 2015 □ J. Felkner, defended in 2016 □ R. Klis, defended
in 2016 $\ \square$ C. Leyder, defended in 2018 $\ \square$ Y. Ou, in progress $\ \square$ Y.E. Harmanci, defended in 2018 $\ \square$ H. Martin-Sanz,
defended in 2019 $\square$ K. Tatsis, defended in 2021 $\square$ Ch. Mylonas, defended in 202 $\square$ Mohamadreza Afrasiabi, defended in
$2021\ \Box\ R.\ Zaccherini, defended\ in\ 2021\ \Box\ G.\ Aguzzi, "Investigation\ of\ metamaterials\ to\ control\ the\ propagation\ of\ ground$
and seismic vibrations in civil structures", in progress   C. Hoelzl, "On Board Monitoring for Railway Infrastructure", in
progress $\square$ S. Nicoli, "Enhancement of the XFEM for application on complex geometries", in progress $\square$ S. Ganzeboom,
$\hbox{``Engineering Self-Aware Structures with Living Materials'', in progress} \ \square \ G. \ Arcieri, \hbox{``Monitoring -based Decision Support}$
of Railway Infrastructure", in progress $\square$ K. Vlachas, "Nonlinear Model Order Reduction", in progress, $\square$ T. Simpson,
"Substructuring as a ROM for Hybrid Simulation", in progress $\square$ K. Chondorgiannis, "Nonlinear Metamaterial Unit
Lattices", in progress $\square$ P. Martakis, "SHM for Enabling Dynamic Earthquake Risk Assessment", in progress <b>Postdoc:</b> Dr.
M. Spridonakos (2011-2013) $\square$ Dr. S. Triantafyllou (2011-2012) $\square$ Dr. B. Barahona (2016-2018) $\square$ Dr. L.D. Avendano
$(2016\text{-}2018) \ \Box \text{Dr. V. Dertimanis (ongoing)} \ \Box \text{ Dr. I. Abdallah (ongoing)} \ \Box \text{ Dr. K. Agathos } (2019\text{-}2021) \ \Box \text{ Dr. Z. Lai } (2019\text{-}20$
2022) $\square$ Dr. A. Colombi (ongoing) $\square$ Dr. C. Stoura (ongoing) $\square$ Dr. S. Gres (ongoing) $\square$ Dr. L. Estevez (ongoing) $\square$ Dr.
Y. Reuland (ongoing)

# SELECTED JOURNAL EDITORIAL ACTIVITIES

- Co-editor in Chief, Data Centric Engineering (Cambridge University Press)
- Editorial Board Member, Journal of Sound & Vibration
- Editorial Board Member, Structure & Infrastructure Engineering, Taylor & Francis
- Editorial Board Member, Mechanical Systems and Signal Processing, Elsevier
- Associate Editor, Journal of Engineering Mechanics, ASCE
- Editorial Board Member, Archive of Applied Mechanics, Springer

## SELECTED ACTIVE MEMBERSHIPS IN SCIENTIFIC SOCIETIES

since 2022	President, SWICOMMAS, Swiss Community for Comput. Methods in Applied Science
since 2021	Member of the Swiss National Research Council, Division IV: Programmes
since 2021	Vice President, European Academoy of Wind Energy (EAWE)
since 2018	Chair, EMI Dynamics Committee of the ASCE
since 2015	Branch President, ASCE International Group in Switzerland
	SELECTED PRIZES/AWARDS

- 2022 Thorpe Medal, awarded from the European Council (shared authorship award)
- 2020 EASD Junior Research Prize in the area of Computational Structural Dynamics, by the EASD
- 2020 Walter L. Huber Career Prize awarded by the ASCE
- 2019 TUM-IAS Hans Fischer Fellowship, awarded by the TÜV Süd Foundation
- 2016 T. Francis Ogilvie Young Investigator Lecture award (MIT).
- 2015 ERC Starting Grant, ERC-2015-StG #679843, by the European Research Council.
- 2010 Distinction, Fu Foundation School of Engineering and Applied Science at Columbia University
- 2009 Mindlin Award, Civil Engineering and Engineering Mechanics in Columbia University
- 2006 Fulbright Fellow

Yayles.