Curriculum Vitae - Veronica Pazzi

Research Interests

The main research topics are in the field of applied geophysics, engineering geology, and applied seismology. They include the application of non-invasive surface geophysical techniques (mainly electrical resistivity tomographies, induced polarization, and seismic noise) for the study, characterization, and monitoring of instability phenomena (landslides and sinkholes) both at local and regional scale, as well as other environmental problems. Part of the research is also focused on the application of geophysical techniques to archaeology and cultural heritage, to the characterization and quantification of site effects induced by earthquakes, to the development of expeditious methods for the characterization of the seismic vulnerability of buildings and cultural sites of interest, and to the improvement of perception and awareness of geological hazards and resilience.

Education

2011: PhD in Civil and Environmental Engineering, University of Florence. Thesis: "Optimization of the electrokinetic remediation (EKR) of soils polluted by heavy metals."

2007: M.Sc. in Environmental Engineering, University of Florence. Thesis: "2D electrical resistivity topographies to reconstruct the paleo coast at Alberese (GR) and to locate any ancient coastal anthropic structures".

Research activity

Present: Associate Professor in Applied Geophysics at the University of Firenze

2021-2024: researcher in applied seismology at the University of Trieste (Italy) (involvement in 2 national projects). 2011-2021: post-doc fellowship in landslide characterization and monitoring at the University of Firenze (Italy): involvement in 32 national projects, 1 H2020 project, and 3 other international projects.

Career, Award, and International Activities

2024: Invited Speaker at the 8th International Geologica Belgica meeting

- 2024-present: Chair Associate of the UNESCO Chair "Prevention and Sustainable Management of Geo-Hydrological hazards" of the University of Florence
- 2024: Member of the commission of the award "Premio di laurea in geofisica V. Illiceto"
- 2024: Co-convener EGU SM8.1 "Assessment of Earthquake Related Hazards, Site Effects, and Microzonation"
- 2024: Member of the commission of the AGLC "Licio Cernobori" award (Association for the Geophysics Licio Cernobori) for the topic "Seismic characterization of the territory"
- 2023-present: Member of the Directive Council of the Italian section of the IAEG

2023: Member of the scientific committee of the Italian Congress BEGEO 2023

2023: Member of the commission of the AGLC "Licio Cernobori" award (Association for the Geophysics Licio Cernobori) for the topic "Seismic characterization of the territory"

- 2022(-2026): Scientific Officer of the EGU NH3 Landslide Hazard subdivision
- 2022-present: Member of the SEG Near-Surface Geophysics Global Subcommittee
- 2022: EGU2022 OSPP (Outstanding Student Poster and PICO) Judge
- 2022: Co-convener EGU NH3.8 "Landslide monitoring: recent technologies and new perspectives"
- 2022: Member of the commission of the AGLC "Licio Cernobori" award (Association for the Geophysics Licio Cernobori) for the topic "Seismic characterization of the territory"

2021: Co-convener EGU ITS3.2/BG7 "Climate extremes, biosphere and society: impacts, cascades, feedbacks, and resilience"

2020(-2030): National Scientific Qualification to become Associate Professor in Geophysics

2019: Invited speaker at Convegno tra geologia e geofisica 2019 (XVI Workshop in geofisica – VII Giornata di Formazione) 2019: Co-convener EGU NH9.7 "Monitoring and modelling of dangerous phenomena: innovative techniques for hazard evaluation and risk mitigation"

2019: EGU2019 OSPP (Outstanding Student Poster and PICO) Judge

2019-Present: member of the IAEG Italian Section

2018: Co-convener EGU NH9.9/AS5.20/GI1.9/HS11.41/SSS13.64 "Monitoring and modelling of dangerous phenomena: innovative, low-cost techniques and constraint of engineering-geological models for hazard evaluation and risk mitigation (co-organized)"

2018: EGU2018 OSPP (Outstanding Student Poster and PICO) Judge

2018-Present: AIGA member

2018(-2028): National Scientific Qualification to become Associate Professor in Engineering Geology

2017: Chairman poster section EGU GI1.1/EMRP4.16/SSS12.25 "Applications of Data, Methods and Models in Geosciences (co-organized)

2017: EGU2017 OSPP (Outstanding Student Poster and PICO) Judge

2017-Present: EGU member

2016-2022: Research Assistant at the UNESCO Chair "Prevention and Sustainable Management of Geo-Hydrological hazards" of the University of Florence

2015: Co-convener ICRAE "Civil engineering and Spatial Planning"

2011: Best Ph.D. Thesis at the RemTech 2011 National Award

2007-Present: EAGE and SEG member (since 2018 SEG Active member)

Editor and reviewer activities

Editorial board member of the journals: NHESS, Landslides, and International Journal of Geophysics

2024-present: Special Section Editor (submission deadline 01/07/2025): "Humanosphere and near-surface geophysics" in Interpretation (https://library.seg.org/page/inteio/interpretation-humanosphere-near-surface)

2023-2024: Guest Editor of the Special Issue: "Landslide Studies integrating Remote Sensing and Geophysical Data, second Edition" in Remote Sensing (https://www.mdpi.com/journal/remotesensing/special_issues/Landslide Remote Sensing)

2022-present: Guest Editor of the Special Issue (submission deadline: 12/07/2025): "Advances in Studies of DGSDs and Lateral Spreads" in Geosciences (https://www.mdpi.com/journal/geosciences/special_issues/813Y5W1Z35)

2022-2023: Guest Editor of the Special Issue: "Landslide Studies integrating Remote Sensing and Geophysical Data" in Remote Sensing (https://www.mdpi.com/journal/remotesensing/special_issues/Landslide_Remote_Sensing)

2022-2024: Guest Editor del Research Topic: "Women in Science: Geohazards and Georisks 2022" (https://www.frontiersin.org/research-topics/46054/women-in-science-geohazards-and-georisks-2022)

2021-2023: Guest Editor of the Topic: "Natural Hazards and Disaster Risks Reduction" (https://www.mdpi.com/topics/Natural_Hazards_Disaster_Risks_Reduction)

2021-2022: Guest Editor of the Special Issue "Geo-hazards and risk reduction approaches" in Sustainability (https://www.mdpi.com/journal/sustainability/special_issues/Geo-Hazards_Risk_Reduction)

2019-2020: Guest Editor of the Special Issue "Landslides and geophysical investigations: advantages and limitation" in International Journal of Geophysics (https://www.hindawi.com/journals/ijge/si/483412/)

Reviewer for many international journals

Teaching

Present at University of Firenze: courses of "Applied Geophysics", "Computational Geophysics" for the MSc and "How geophysical techniques can help to deal with different environmental problems" for the PhD in Earth and Planetary Science

2021 - 2024 at University of Trieste: courses of "Applied seismology", "Microzonation", and "Earth Physics"

2017: abroad teaching activities in Bolivia and Albania about "Seismic survey", "Geomorphology" and "Geo-hydrological risk"

2012-2021 at University of Florence: lessons about "GPR", "Seismic risk", "Seismic noise", "Technical regulation for the constructions", "Electrical resistivity", "Geophysics: electrical resistivity and passive seismic", "Geophysical survey", "Geophysical method for the engineering", "Geophysics for geotechnical applications", "Applied hydrogeology", "Applied geophysics: theory and applications"

BSc and MSc thesis tutor

2021-2024 at University of Trieste: Tutor of 3 MSc thesis and of 2 PhD student and co-tutor of 2 MSc thesis and 1BSc thesis.

2008-Present at University of Florence: Co-Tutor of 5 BSc thesis, 6 MSc thesis, and 1 PhD thesis; counsellor for 2 BSc thesis, 6 MSc thesis, and 5 PhD thesis

University third mission activities

2024: activity on "Environmental sustainability - Climate change: impact on the environment and mitigation strategies" with students of the last year of the high schools as part of the "Active orientation in the school-university transaction - PNRR program Oriented to change the world, for a sustainable future";

- 2022-2024: laboratory activities on "Earthquakes, seismic monitoring networks and shaking maps" with the students of five classes of the middle school and three class of the high school;
- 2022: as part of the events "Trieste NEXT 2022 THE BOUNDARIES OF SCIENCE. Innovation and research: ethical limits and new frontiers", "Researchers' Night", and "Barcolana 2022", organization and actively participation in the creation of the Trieste edition of the traveling exhibition "Earthquakes in Italy" organized by the Department of National Civil Protection;

- 2021: activity "Seismic safety earthquakes, seismic monitoring networks and shaking maps" in the stand of the University of Trieste as part of the event "Trieste NEXT 2021 TAKE CARE. The science for sustainable well-being";
- 2013-2019: activities on geological risks with schools of all levels as part of the five editions of the project between DST-UNIFI and INAIL Tuscany Region Directorate "Spreading knowledge and awareness of hydrogeological risks - Exploiting knowledge, innovation and education to develop the culture of geological safety in schools"

References

Scopus Author ID: 55360171300 - WOS Researcher ID: C-9526-2016 - Orcid id: orcid.org/0000-0002-9191-0346

Author of 59 papers (54 indexed on Scopus), 1 book and 3 chapters, 9 proceedings, and 55 abstracts; 7 Invited oral presentations, 12 Oral presentations (and co-author of more than 30 oral presentations and more than 30 Poster presentations)