

TORRESE Patrizio

Curriculum Vitae

Current Position: Assistant Professor in Applied Geophysics (Geo/11) at University of Pavia, Italy
Dipartimento di Scienze della Terra e dell'Ambiente
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National Scientific Qualification (ASN)

- Associate Professor in Geophysics (04/A4) (2023)
- Associate Professor in Engineering Geology, Physical Geography and Geomorphology (04/A3) (2023)

Expertise: Applied Geophysics

ORCID: <http://orcid.org/0000-0002-4643-7422>

Scopus: <http://www.scopus.com/authid/detail.url?authorId=8683861200>

Google Scholar:

<http://scholar.google.it/citations?user=S9xyT6MAAAAJ&hl=it&oi=ao&cstart=20&pagesize=20>

Research Interest

- Planetary Geophysics
- Glacier Geophysics
- Hydro-geophysics
- Archaeo-geophysics
- Engineering geophysics
- Environmental geophysics
- Improvement and development of shallow geophysical methods

Scientific-Disciplinary Sector (Italian MIUR SSD)

- 2008-2015, Engineering Geology (GEO/05)
- 2015-present, Applied Geophysics (GEO/11)

Languages

- Italian, mother tongue
- English, fluent
- Spanish, fair

Degrees

- 2000, M.Sc. Degree with honours in Geological Sciences, University of Chieti-Pescara
- 2004, Ph.D., University of Chieti-Pescara

Postdoctoral Employment

- 2005-2008, Lecturer, Research Grant, University of Chieti-Pescara

Professional Qualification

- 2001, Professional Geologist Qualification
- 2005-2019, Professional Geologist Registration, Register of Italian Association of Professional Geologists

Company Management

-2005-2006, Founder member (promoting limited partner) of OndaSonda Service S.a.s. Limited Partnership (geophysical prospecting and engineering geology service company) - Specialist in Applied Geophysics

Patent for industrial invention

Experimentation that led to the granting of the patent for industrial invention "Metodo per la conversione di energia e sistema di climatizzazione" submission number: BO2011A000337/102011901953125, WIPO code: 10BO2011A000337, date of grant of the patent: 21-02-2014, submission number: 10-06-2011, date of grant of the patent: 0001406303, patent classification: F24J 2/24 , F24J 2/28 , F24F 5/00 , F25B 27/00.

Technical-Scientific and Professional Consulting Activity

- 2003-2004, Consultant of C. Lotti & Associates S.p.A. Engineering Corporation within "Plan Maestro de Agua Potable de San Pedro Sula-Honduras" Project - Specialist in Hidrogeology and Hidro-Geophysics
- 2004, Consultant of Seismic Service of Tuscany Region, Docup 2000-2006 Program, seismic surveys inspector - Specialist in Geophysics
- 2005, Consultant of TOTO Costruzioni Generali S.p.A. Engineering Corporation - Specialist in Geophysics
- 2012-2015, Consultant of Aguas de San Pedro S.A. De C.V. Corporation within "Estudio para la evaluaciòn de los recursos de aguas subterráneas en el àreas de Cofradia, Sunceri, San Pedro Sula Sur - Honduras" – Senior Hydro-Geologist
- 2013, Consultant of Aguas de San Pedro S.A. De C.V. Corporation within "Estudio Geofisico para la evaluaciòn de los recursos de aguas subterráneas en el àreas de Cofradia, Sunceri, San Pedro Sula Sur - Honduras" – Senior Geophysicist
- 2013, Senior Data Processing Geophysicist of ACTS (Advanced Construction Technology Services) team (GGM S.r.l.) within IDRIS (Inner Doha Resewearge Implementation Strategies) Contract GSI-02 Geophysical Survey by CH2M HILL, Public Works Authority of Doha, Qatar. Lead Engineering Geophysicist Supervision and Direction of the Seismic Reflection data processing from the data analysis to the interpretation and reporting.

European Space Agency Research Projects

- 2017, ESA PANGAEA 2017 Training and Test Campaign Investigator and Experiment/Instrument Safety Responsible for AGPA-G project.
- 2017, ESA PANGAEA-Extension 2017 Test Campaign Investigator and Experiment/Instrument Safety Responsible for AGPA-G project.
- 2018, ESA PANGAEA 2018 Training and Test Campaign Investigator and Experiment/Instrument Safety Responsible for A1TRAP experiment which formed part of the Analog-1 geology and science support activity.
- 2018, ESA PANGAEA-Extension 2018 Test Campaign Investigator and Experiment/Instrument Safety Responsible for A1TRAP experiment which formed part of the Analog-1 geology and science support activity.

Oceanographic Campaigns

- 2005, Oceanographic Campaign on board of the ship "Universitatis" by CoNISMa within "PROMETHEUS" Research Project (an Integrated Study of the Marsili SMT., Thyrrhenian Sea).

MIUR (Italian Ministry of Education, University and Research) Funded Research Projects (competitive calls)

- 2002-2004, PRIN 2002, "Improvement and Development of Geophysical Methods for Soil Seismic Characterisation", member of the UniCH Research Unit

- 2005-2007, PRIN 2005, “Subsoil geological exploration in unstable slope areas and dynamic parameterization of soils using geophysical methods”, member of the UniCH Research Unit
- 2005-2007, PRIN 2005, “Improvement and Development of Geophysical Methods and Numerical Modeling Aimed at the Study of Unstable Slopes in High Seismic Hazard Areas”, member of the UniCH Research Unit
- 2008-2010, PRIN 2008, “Pollution of the Oltrepò Pavese plain aquifer induced by the uprising of deep brackish ground-waters: mixing processes and phenomenon evolution studies aimed at a proper management of the ground-water resource”, member of the UniPV Research Unit
- 2017-2022, PRIN 2017, “Overtime tectonic, dynamic and rheologic control on destructive multiple seismic events - Special Italian Faults & Earthquakes: from real 4D cases to models”, member of the UniPV Research Unit
- 2023-2025, PRIN 2022, “New approaches to soil management for the improvement of vineyard resilience to climate change pressures (UNDER-VINE)”, member of the UniPV Research Unit

Other Research Projects

- 2006-2007, “Italian strong-motion database in the period 1972-2004” Project (DPC, INGV) member of the DiGAT Research Unit
- 2005, “PROMETHEUS” Research Project (an Integrated Study of the Marsili SMT., Thyrrhenian Sea) (PRAMA S.r.l., CeRS-Geo, INGV, ISMAR-CNR, Polytechnic of Bari), member of the CeRS-Geo Research Unit
- 2009, “Emergenza Terremoto - Indagini urgenti finalizzate alla microzonazione sismica per la ricostruzione delle aree maggiormente danneggiate dal terremoto aquilano dell’aprile 2009” Project (DPC), member of the CeRS-Geo Research Unit.
- 2013-2019, Geophysical study of the Hydrogéologique Expérimental Site de Poitiers Project by University of Poitiers (France).
- 2017-2020, Scaloria cave archeological international site investigator (University of Genova-University of Tübingen).
- 2018, Arma Veirana archeological international site investigator (Project directed by University of Genova, with 9 international partner universities).
- 2019, ANDROMEDA (A New integrateD hydROgeological Model to assEss landsliDes and flood prone Areas in Oltrepò Pavese), (Università di Milano, Università di Pavia, Università Cattolica del Sacro Cuore di Piacenza, Istituto di Ricerca per la Protezione Idrogeologica, finanziato da Fondazione Cariplo, attività “Studio geofisico per la caratterizzazione, l’analisi e il monitoraggio del primo sottosuolo
- 2020, VIRECLI (Viticultura di precisione per la REgolazione degli equilibri vegeto-produttivi, la protezione del suolo e l’adattamento al cambiamento CLimatico) (Università di Milano, Università di Pavia, Università Cattolica del Sacro Cuore di Piacenza), finanziato da Regione Lombardia, attività “Studio geofisico per la caratterizzazione, l’analisi e il monitoraggio del primo sottosuolo
- 2020-2022, CE4WE (Circular Economy for Water and Energy) (Approvvigionamento energetico e gestione della risorsa idrica nell’ottica dell’Economia Circolare) - , ID 1139857, Call “Hub Ricerca e Innovazione” cofinanziata dal POR FESR 2014-2020 ASSE I., attività “Studio geofisico per la caratterizzazione, l’analisi e il monitoraggio del suolo e della risorsa idrica, e lo sviluppo di un modello idrologico-idrogeologico”
- 2021, DRIVE - LIFE (Drought Resilience Improvement in Vineyard EcosystemsLife LIFE19 ENV/IT/000035 LIFE Environment and Resource Efficiency project (Università Cattolica del Sacro Cuore di Piacenza, Università di Milano, Università di Pavia), attività “Studio geofisico per la caratterizzazione, l’analisi e il monitoraggio del primo sottosuolo
- 2021, Resilvigna (Dipartimento di Scienze delle produzioni vegetali sostenibili dell’Università Cattolica del Sacro Cuore) finanziato da Regione Emilia Romagna nell’ambito della Misura 16.1 del PSR 2014-2020, attività “Studio geofisico con tomografia elettrica 3D”.

- 2023, Study on sediment dynamics and transport mechanisms in the proglacial area of the Solda glacier basin (Ortles massif, South Tyrol), responsible for the geophysical study, in collaboration with the University of Potsdam and the University of Bolzano.
- 2023-2024, Superintendent for the Geophysical study “Analiza i interpretacja wyników badań geofizycznych w wybranych stanowiskach (Apeniny Północne)” / “Analysis and interpretation of geophysical research results at selected sites (Northern Apennines)”, Uniwersytet Śląski w Katowicach / University of Silesia in Katowice (Poland).

MIUR (Italian Ministry of Education, University and Research) Funded University Guidance Projects

- 2014-2022, Superintendent of the PLS-L34–UniPV (Piano Nazionale Lauree Scientifiche, Geologia project, University of Pavia).

Conference Review Committee Membership

- 2008, Member of the Paper Review Committee for the Sixth International Conference on Case Histories in Geotechnical Engineering, August 11-16, 2008, Arlington, Virginia, Missouri University of Science and Technology.

Review for Scientific Journal

- Surveys in Geophysics (Springer), ISSN: 0169-3298 (Print) 1573-0956 (Online), 3 reviews completed, 2016
- Planetary and Space Science (Elsevier), ISSN: 0032-0633, 4 reviews completed, 2021-2022

Teaching of University Courses within the undergraduate and graduate programs

- 2005-2006, Teaching of “Applied Geophysics”, Master’s Degree in “Geo-Environmental Hazards and Resources”, University of Camerino.
- 2005-2008, Teaching of “Subsoil Geological Exploration”, Bachelor's Degree in “Environment and Territory Techniques”, University of Chieti-Pescara.
- 2008-2010, Teaching of “Light Geognostic and Geophysical Surveys”, Bachelor's Degree in “Geology and Natural Resources”, University of Pavia.
- 2009-2010 and 2011-2012, teaching of “Light Geognostic and Geophysical Surveys”, Master’s Degree in “Applied Geological Sciences”, University of Pavia.
- 2013-2023, teaching of “Applied Geophysics and Underground Surveys”, Master’s Degree in “Applied Geological Sciences”, University of Pavia.
- 2014-2023, teaching of “Terrestrial Physics and Geophysics”, Bachelor's Degree in “Geological Sciences”, University of Pavia.
- 2023-present, teaching of “Applied Geophysics”, Master’s Degree in “Geosciences for Sustainable Development”, University of Pavia.
- 2023-present, teaching of “Terrestrial Physics”, Bachelor's Degree in “Geological Sciences”, University of Pavia.

English language teaching of University Courses within the undergraduate and graduate programs

- 2014-2023 teaching of “Applied Geophysics and Underground Surveys”, Bilingual Master’s Degree in “Applied Geological Sciences”, University of Pavia.
- 2023-present, teaching of “Applied Geophysics”, Master’s Degree in “Geosciences for Sustainable Development”, University of Pavia.

Teaching of University Courses within PhD programs

- 2024-present, teaching of “Geophysical exploration for near-surface target detection and imaging”, PhD program “Earth and Environmental Sciences”, 39° serie, University of Pavia

Teaching within Hydrocarbon Exploration and Production field - Energy Technology

- 2015, High degree training workshop for SNAM-STOGIT personnel (geologists, reservoir engineers and geophysicists) “Interpretazione sismica e monitoraggio microsismicità – Microsismicità e reti microsismiche di superficie), 8-9 giugno, Palazzo STOGIT, Crema.

-2015-2019, Inclusion in the list of trainers/instructors of Eni Corporate University's training courses.

Teaching within Professional Workshops and 2nd Level University Master degree Courses

- 2004, Professional Register workshop “Caratterizzazione Dinamica dei Terreni e Valutazione della Risposta Sismica Locale (normativa sismica Ordinanza P.C.M. 3274/03)”, Ordine dei Geologi della Regione Umbria , Perugia.
- 2004, Professional workshop “Tecniche Geofisiche e Geognostiche per La Caratterizzazione Dinamica dei Terreni (normativa sismica Ordinanza P.C.M. 3274/03), CeRS-GEO, Arezzo.
- 2004, Professional Register workshop “Normativa Sismica e Valutazione degli Effetti Locali (normativa sismica Ordinanza P.C.M. 3274/03)”, Ordine dei Geologi della Regione Toscana, Firenze.
- 2005, Professional workshop “Fronteggiare Emergenze Sociali e Sociosanitarie” – modulo Rischio Sismico e sua Gestione, POR Abruzzo Obiettivo 3 Asse C Misura 3, Chieti.
- 2006, Professional workshop “Sviluppo Competenze e Professionalità” – modulo Rischio Sismico e sua Gestione, nell’ambito del Progetto Regionale POR Abruzzo Obiettivo 3 Asse C Misura 3, Chieti.
- 2007, Professional Register workshop “Caratterizzazione in campo statico e dinamico di depositi naturali, di terreni migliorati e di geosintetici”, A.Di.S - Di.G.A.T. - Ce.R.S.-Geo, Chieti.
- 2007, Professional Register workshop “La Pratica della Gestione dei Siti Inquinati, Caratterizzazione, Analisi di rischio, Interventi”, A.Di.S. - Ce.R.S.-Geo, Giulianova (TE).
- 2007, 2nd Level University Master degree Course “Smaltimento rifiuti, risorse idriche ed emergenza ambientale” Progetto Regionale POR Abruzzo Obiettivo 3, 2000-2006, Chieti.
- 2008, Professional Register workshop “Le applicazioni geofisiche nella caratterizzazione del primo sottosuolo”, Ordine dei Geologi della Regione Abruzzo, Pescara.
- 2009, Professional workshop “Corso Professionalizzante per la Microzonazione Sismica dell’Area Aquilana, Università degli Studi “G. d’Annunzio” di Chieti-Pescara - Università degli Studi dell’Aquila - Dipartimento di Protezione Civile (DPC) - Ordine dei Geologi della Regione Abruzzo, Chieti.
- 2009, Professional workshop “Learning Week”, Regione Lombardia – Entertraining - Centro di Orientamento dell’Università degli Studi di Pavia, Salice Terme (PV).
- 2016, Member of the Organizing Committee of 1st and 2nd editions of the professional course for science school teachers “Pomeriggi all’Università’: la Chimica incontra le Scienze Biologiche, Biotecnologiche e Geologiche. University of Pavia.
- 2017, Member of the Organizing Committee of 1st and 2nd editions of the professional course for science school teachers “Pomeriggi all’Università: le Scienze Biologiche e le Biotecnologie incontrano la Chimica e le Scienze Geologiche. University of Pavia.
- 2018, Member of the Organizing Committee of 1st and 2nd editions of the professional course for science school teachers “Pomeriggi all’Università: le Scienze Geologiche incontrano le Scienze Chimiche, Biologiche e Biotecnologiche. University of Pavia.

Institutional Assignment

- 2021-2022, Superintendent of the interdisciplinary technological didactic laboratory PLS Laboratory of the Dipartimento di Scienze della Terra e dell’Ambiente of the University of Pavia.
- 2019-2022, Delegate of the head of the didactic council “Scienze Geologiche” of the University of Pavia for the reduction of the student dropout rate university guidance - undergraduate and graduate program.
- 2009-2022, Superintendent of the university guidance stages scheduled under the Project “Convenzione Quadro di Tirocinio di Formazione ed Orientamento”, February 22nd 2011, Dipartimento di Scienze della Terra e dell’Ambiente of the University of Pavia.
- 2009-present, Superintendent of the Applied Geophysics Laboratory of the Dipartimento di Scienze della Terra e dell’Ambiente of the University of Pavia.
- 2010-2021, Delegate of the head of the didactic council “Scienze Geologiche” of the University of Pavia for the university guidance - undergraduate and graduate program.
- 2013-2018, Member of the Technical-Scientific Committee of the Centro di Servizi di Ateneo “COR-Centro Orientamento Universitario”, University of Pavia (DR n. 991/2014 del 20/6/2014).

- 2015-2018, Delegate of the head of the Department “Dipartimento di Scienze della Terra e dell’Ambiente” of the University of Pavia for the promotion and communication of the Department.
- 2017, Superintendent for the university of the stages under the european cultural exchange projects for high school students, University of Pavia.
- 2017, Supervisor of a curricular training internship for undergraduate students, University of Pavia.
- 2018, Supervisor of a part time training for undergraduate students, University of Pavia.
- 2018, Supervisor of a curricular training internship for undergraduate students, University of Pavia.
- 2020-2022: referente contrasto abbandoni del Corso di Laurea in Scienze Geologiche L-32, dell’Università di Pavia
- 2021-present: firefighting, emergency management and first aid officer in university buildings, University of Pavia.
- 2021-2024: member of the “Giunta del Dipartimento”, Dipartimento di Scienze della Terra e dell’Ambiente, University of Pavia.

Competitive Call Committee Presidency

- 2016, President of the competitive call committee for the selection of 2 definite term contract collaborators for graduate students, University of Pavia.
- 2016, President of the competitive call committee for scholarship awards for undergraduate students, University of Pavia.
- 2017-present President of the competitive call committee for the selection of 1 definite term contract collaborator for graduate students, University of Pavia.
- 2017, President of the competitive call committee for scholarship awards for undergraduate students, University of Pavia.
- 2018, President of the competitive call committee for the selection of 1 definite term contract collaborator for graduate students, University of Pavia.
- 2021, President of the competitive call committee for the selection of 5 definite term contract collaborator for graduate students, University of Pavia.

Examination Committee Membership

- 2008, Member of the Admission Committee of a Research Grant, University of Pavia
- 2009, Member of the Final Examination Committee of the Ph.D. Course “Earth Sciences”, XXIII series, University of Pavia
- 2010, Member of the Admission Committee of the Ph.D. Course “Earth Sciences”, XXVI series – XII new series, University of Pavia
- 2010, Member of the Admission Committee of a Research Grant, University of Pavia
- 2013, Member of the Admission Committee of the Master’s Degree in “Applied Geological Sciences”, University of Pavia.
- 2010-2014, Member of the Bachelor’s Degree Examination in “Geology and Natural Resources”, University of Pavia for 3 times.
- 2010-2014, Member of the Master’s Degree Examination in “Applied Geological Sciences”, University of Pavia for 6 times.
- 2014, Member of the Final Examination Committee of the Ph.D. Course “Earth Sciences”, XXVIII series, University of Pavia
- 2008-present, Member of the Examination Committee of the university courses “Light Geognostic and Geophysical Surveys”, “Applied Geophysics and Underground Surveys”, “Terrestrial Physics and Geophysics”, “Geophysics”, “Engineering Geology”, “Fundamentals of Hydrogeology”, “Hydrogeology”, “Applied Hydrogeology”, “Engineering Geology for the Territorial Planning” of the undergraduate-graduate program, University of Pavia.

PhD programs Committee Membership

- 2024-present, Membership of the PhD Committee of the PhD program “Earth and Environmental Sciences” 39° cicle, University of Pavia.

Bachelor's, Master's and Ph.D. Degree Thesis Supervision

- 2010/2011, 2 Master's Degree students supervised, "Applied Geological Sciences", University of Pavia.
- 2010/2011, 2 Master's Degree student co-supervised, "Applied Geological Sciences", University of Pavia.
- 2010-2011, 1 Ph.D. student co-supervised, "Earth Sciences", XXIV series, University of Pavia.
- 2012/2013, 3 Master's Degree students supervised, "Applied Geological Sciences", University of Pavia, 1 Master's Degree student co-supervised, "Physical Sciences", University of Pavia.
- 2013/2014, 1 Master's Degree student co-supervised, "Applied Geological Sciences", University of Pavia.
- 2014/2015, 4 Master's Degree students supervising, "Applied Geological Sciences", 1 Bachelor's Degree student supervising, "Science and Technology for the Nature", University of Pavia.
- 2016/2017, 1 Master's Degree student supervising, "Applied Geological Sciences", University of Pavia.
- 2017/2018, 2 Master's Degree student supervising, "Applied Geological Sciences", 3 Bachelor's Degree student supervising, "Geological Sciences", University of Pavia.
- 2018-2019, 1 Master's Degree student supervising, "Applied Geological Sciences", 1 Bachelor's Degree student supervising, "Geological Sciences", University of Pavia.
- 2019-2020, 1 Bachelor's Degree student supervising, "Geological Sciences", University of Pavia.
- 2020-2021, 2 Master's Degree student supervising, "Applied Geological Sciences", University of Pavia.
- 2022-2023, 1 Bachelor's Degree student supervising, "Geological Sciences", University of Pavia.

Public Engagement, Conference and Summer School Organization

- 2011-2022, Superintendent of the annual teacher and vocational guidance training for high-school students "Progetto formativo e di orientamento studenti scuole secondarie di secondo grado - Dipartimento di Scienze della terra e dell'Ambiente - Università di Pavia, agreement rep. n. 220/2015 - Prot. N° 11839 - 11/03/2015).
- 2012, Member of the Organizing Committee, Chairman and Speaker of the conference "Guardando in profondità. Le Scienze della Terra offrono uno sguardo profondo sulla Pianura Padana", University of Pavia, within the national event "Settimana del Pianeta Terra" promoted by FIST, Università di Pavia.
- 2014, Member of the Organizing Committee and geo-tourist guide of the geo-event "Pavia: geoturismo in città", city of Pavia, within the national event "Settimana del Pianeta Terra" promoted by FIST, Università di Pavia.
- 2015, Member of the Organizing Committee and Chairman of the conference "Dall'Appennino al Ticino: viaggio geologico virtuale attraverso il territorio pavese", University of Pavia, within the national event "Settimana del Pianeta Terra", Università di Pavia.
- 2015, Member of the Organizing Committee and Chairman of the conference "Videoconferenza con l'equipaggio della spedizione scientifica internazionale IODP 360 dall'oceano indiano, a bordo della Joides Resolution", videoconferencing with the scientific crew on board of IODP, Expedition 360 from SW Indian Ridge, Università di Pavia.
- 2016, Member of the Organizing Committee and Chairman of the conference "Dai fondali oceanici alla complessità ignota del mantello terrestre", University of Pavia, within the national event "Settimana del Pianeta Terra", Università di Pavia.
- 2016, Member of the Organizing Committee and Chairman of the conference "Il terremoto del centro Italia: cause ed effetti geologici", Università di Pavia.
- 2017, Member of the Organizing Committee and Chairman of the conference "Dolomiti: un patrimonio da tutelare, una scogliera fossile da scoprire", University of Pavia, within the national event "Settimana del Pianeta Terra", Università di Pavia.
- 2018, Member of the Organizing Committee, Chairman and Lecturer of the workshop "Meteoriti, crateri e tunnel di lava: il contributo delle scienze geologiche allo studio dei corpi e degli analoghi planetari e alla preparazione delle future missioni esplorative planetarie", University of Pavia, within the national event "Settimana del Pianeta Terra", Università di Pavia.
- 2018, Member of the Organizing Committee, Lecturer and Investigator of the International Summer School "Natural Hazards and related Sediment Dynamics on Catchment Scale", 2nd Oltrepò Summer School (Pavia, Lombardy, Italy) 02-06.07.2018, (UniPV-Italy, Uni Bydgoszcz-Poland,

Uni Regina-Canada, Uni Prague-Czech Republic, Uni Isfahan-Iran, Uni Tübingen-Germany, BAG Vienna-Austria, Uni Genova-Italy).

- 2021, Speaker of the seminar “Le geoscienze per la ricerca di ambienti planetari abitabili” held during “Pillole di Scienza-Aspettando la Notte Europea dei Ricercatori”, event organized as part of the Project SHARPER, Notte Europea dei Ricercatori, funded by the European Commission, Pavia, Castello Visconteo, 23 September 2021.

Consulting Projects, Agreements and Contributions to Research Funds

- 2009, “Reflection Seismic Data Processing with Innovatory Techiques”, Consulting Agreement between Methodo S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2010, “Seismic Data Processing with Innovatory Techiques”, Consulting Agreement between Geoexplorer S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2010, “Reflection Seismic Data Processing with Innovatory Techiques”, Consulting Agreement between Geologica S.n.c. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2010, “Seismic Profiles Processing with Innovatory Techiques”, Consulting Agreement between Methodo S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2010, “Seismic Data Processing with Innovatory Techiques”, Consulting Agreement between Studio Gaggiotti and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2011, “Optimization of Processing Techniques for Shallow Reflection Seismic Surveys”, Consulting Agreement between Methodo S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2012, “Optimization of Acquisition Techniques for Shallow Reflection Seismic Surveys”, Consulting Agreement between Aureli Soil S.n.c. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2012, “Survey Design and Undertaking of Shallow Reflection Seismic Surveys and Electric Resistivity Tomography Surveys for the assessment of the Underground Model of a Unstable Slope”, Loc. Valle, Saviore dell’Adamello (BS), Consulting Agreement between Geological and Geophysical Multiservice S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2012, “Estudio para la optimización de la gestión de los recursos hídricos subterráneos en el territorio de San Pedro Sula”, Consulting Agreement between Aguas De San Pedro S.A. de C.V. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2013, “Processing of Seismic Data from Trial Tests for the assessment of optimal acquisition and processing configurations for shallow reflection seismic surveys, city of Doha, Qatar”, Consulting Agreement between Geological and Geophysical Multiservice S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2013, “Estudio destinado a la evaluación de los recursos hídricos subterráneos en algunas áreas en el territorio de San Pedro Sula y del valle de Chamelecón”, Consulting Agreement between Aguas De San Pedro S.A. de C.V. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2013, “Processing of Seismic Data from Trial Tests for the assessment of optimal acquisition and processing configurations for shallow reflection seismic surveys, Consulting Agreement between Studio Madonna and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2014, Electrical Trial Tests for the assessment of optimal acquisition and processing configurations for shallow electrical resistivity tomography surveys, city of L’Aquila, Consulting Agreement between Terra Drilling Technology S.r.l. and the Department of Environmental and Earth Sciences of the University of Pavia.
- 2018, “Processing of Seismic Data from Trial Tests for the assessment of optimal acquisition and processing configurations for shallow reflection seismic surveys, Consulting Agreement

between Studio Madonna and the Department of Environmental and Earth Sciences of the University of Pavia.

- 2022, Assignment for the geophysical study aimed at mapping the subsoil in the Cravino university campus of the University of Pavia, as part of the “Piano Lombardia L.R. 9/2020 - interventi di de-impermeabilizzazione e rinverdimento di aree pubbliche per la mitigazione e l’adattamento ai cambiamenti climatici: approvazione di criteri per la concessione di contributi destinati alle Università pubbliche, finalizzati a promuovere la deimpermeabilizzazione e il rinverdimento di superfici di loro proprietà”, entrusted by Area Tecnica e Sicurezza, Servizio Gestione Facility, Utilities e Ambiente dell’Università di Pavia, CUP F14C22001170007 - [L0144], protocol number 0163765, 18/10/2022.
- 2023, Superintendent for the geophysical study of the design group for the verification and testing of the de-waterproofing project of surfaces owned by the University of Pavia as part of the “Piano Lombardia L.R. 9/2020 - interventi di de-impermeabilizzazione e rinverdimento di aree pubbliche per la mitigazione e l’adattamento ai cambiamenti climatici: approvazione di criteri per la concessione di contributi destinati alle Università pubbliche, finalizzati a promuovere la deimpermeabilizzazione e il rinverdimento di superfici di loro proprietà”, entrusted by Area Tecnica e Sicurezza, Servizio Gestione Facility, Utilities e Ambiente, Università di Pavia
- 2023-2024, Assignment for the geophysical study Analiza i interpretacja wyników badań geofizycznych w wybranych stanowiskach (Apeniny Północne) / Analysis and interpretation of geophysical research results at selected sites (Northern Apennines) entrusted by Uniwersytet Śląski w Katowicach / University of Silesia in Katowice (Poland).

Scientific Associations Membership

- 2020-present, member of CISS (Centro Interdisciplinare Studi Suolo)
- 2020-present, member of the board of directors of CRUST (Centro InterUniversitario per l’Analisi SismoTettonica tridimensionale con applicazioni territoriali)
- 2019-present, UGI (Unione Geofisica Italiana)
- 2006-2019, EEGS (Environmental and Engineering Geophysical Society)
- 2006-2015, AIGAA (Associazione Italiana di Geologia Applicata e Ambientale)

Current scientific-technical collaborations with universities, research centers, organizations, agencies

- Università di Bologna, Italy
- DLR, Institute for Planetary Research, Germany
- European Astronaut Centre, Human Spaceflight and Operations, European Space Agency, Germany
- Università “G. d’Annunzio” di Chieti-Pescara, Italy
- Università di Genova, Italy
- Institut Français du Pétrole Energies Nouvelles (IFPEN), Rueil-Malmaison, France
- Instituto Nacional de Tecnica Aeroespacial, Spain
- Jacobs University Bremen, Germany
- Julius-Maximilians-Universität Würzburg, Germany
- Università di Padova, Italy
- Université de Poitiers, France
- Universität Tübingen, Germany
- CRUST-Interuniversity Center for 3D Seismotectonics with Territorial Applications, Università “G. d’Annunzio” di Chieti-Pescara, Italy.
- Università di Milano-Bicocca, Italy
- Leibniz Centre for Agricultural Landscape Research, Müncheberg, Germany
- Università di Bolzano
- University of Potsdam, Germany
- Uniwersytet Śląski w Katowicach / University of Silesia in Katowice, Poland

Personal Media Appearances and Interviews

Articles published in newspapers

- 2009, Colantonio L., "I geologi scoprono i siti sicuri", *IL CENTRO* (Pescara, IT), 9th May 2009, pag. 8.
- 2012, Bessy L., "Cuatro represas y 75 pozos abastecen de agua la ciudad", *LA PRENSA* (San Pedro Sula, HN), 16th July 2012.
- 2017, Vincenzi P.A., "Alle Canarie per simulare la Luna: il geofisico dell'università Patrizio Torrese in missione sull'isola di Lanzarote", *LA PROVINCIA PAVESE* (Pavia, IT) 29th October 2017, pag. 16.
- 2017, UNIPV.NEWS, "L'Università di Pavia per lo studio del suolo lunare", *UCampus* (Pavia, IT), 30th October 2017.
- 2017, UNIPV.NEWS, "I geologi UniPV impegnati nella ricerca di analoghi planetari adatti alla vita e nella formazione degli astronauti dell'ESA", *NewsUnipv* (Pavia, IT), 30th October 2017.
- 2018, UNIPV.NEWS, "Dall'Università di Pavia a Lanzarote per lo studio del suolo di Luna e Marte", *UCampus* (Pavia, IT), 25th January 2018.
- 2018, Curci G., "Patrizio Torrese il prof che studia la casa su Marte: Vivere su Marte? Ci stiamo organizzando. Patrizio Torrese di ritorno da Lanzarote, tunnel di lava come sul Pianeta Rosso", *LA PROVINCIA PAVESE* (Pavia, IT), 23rd February 2018, frontpage headlines and pag. 25.
- 2019, "I ragazzi del Taramelli e dell'Omodeo di Mortara cercano l'oro nel Ticino", *LA PROVINCIA PAVESE* (Pavia, IT), 4th June 2019.
- 2019, Marziani M., "Batea in mano e gli studenti diventano cercatori d'oro", *IL GIORNO* (Pavia), 6th June 2019.

Highlights published in booklets

- 2018, Servizio comunicazione dell'Università di Pavia, "Missione <<Casa Luna>>", Un anno all'Università di Pavia, Vol. 4/2018.

Video Appearances and Interviews

- 2009, Pelizza C. & Colombo M., "Pavia, restauro al Castiglioni", *TelePaviaWeb* (Pavia, IT), 6th February 2009.
- 2018, Taccani A., UNIPV.NEWS, "Dall'Università di Pavia a Lanzarote per lo studio del suolo di Luna e Marte", *UCampus* (Pavia, IT), 25th January 2018.

Television Appearances and Interviews

- 2018, Wagner L., Sichert J., Simon M, Dokumentation über das training der deutschen Astronauten der ESA, *ZDF TerraX* (Mainz, DE), in production.

Participation in conferences

Speaker at more than 90 meetings.

Distinguished invited speaker e keynote speaker

- Invited Keynote Speaker at 4th Global Summit on Future of Materials Science and Research, Las Vegas, USA, 8-9 November 2022.
- Invited Speaker at International Conference on Magnetism and Magnetic Materials (MagneticMat-2024), Dubai, March 14-16 2024.

Administered financial resources

2008-present, consultancy, commercial and research activity: 164,000.00 euro.

Publications

Author of more than 70 papers.

For more information:

<http://www.scopus.com/authid/detail.url?authorId=8683861200>

<http://scholar.google.it/citations?user=S9xyT6MAAAA&hl=it&oi=ao&cstart=20&pagesize=20>

I give the authorization for the treatment of my personal data according to Italian Law D. Lgs. 196/2003.

December, 2023

Patrizio Torrese