

TORRESE Patrizio

Curriculum Vitae

Current Position: Assistant Professor in Applied Geophysics at University of Pavia, Italy
Dipartimento di Scienze della Terra e dell'Ambiente
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Expertise: Applied Geophysics

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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

Hydrogeophysics

Electrical resistivity tomography

Shallow seismic reflection method

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, Professional Geologist Registration, Register of Italian Association of Professional Geologists

Scientific Associations Membership

-2006-present, EEGS (Environmental and Engineering Geophysical Society)

-2006-2015, AIGAA (Associazione Italiana di Geologia Applicata e Ambientale)

Scientific Institutes Membership

-2009-present, CeRS-Geo, University of Chieti-Pescara

Professional Partnership Membership

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

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

- 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

Other Research Projects

- 2006-2007, "Italian Accelerometric Database 1972–2004" Project (DPC, INGV) member of the CeRS-Geo 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-present, Geophysical study of the Hydrogéologique Expérimental Site de Poitiers Project by University of Poitiers (France).

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).

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.
- 2015, Referee of a Ph.D thesis for the degree of Doctor of Philosophy in "Scienze della Terra", Academic Year 2014-2015, Series XXVIII at the Università degli Studi di Pavia.

Review for Scientific Journal

- Surveys in Geophysics; Springer; Editor in Chief: M.J. Rycroft; ISSN: 0169-3298 (Print) 1573-0956 (Online); Impact Factor: 3.447 (2014), Journal Citation Reports®, Thomson Reuters

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 evaluación de los recursos de aguas subterráneas en el áreas 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 evaluación de los recursos de aguas subterráneas en el áreas 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.

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.
- 2013-2014-present teaching of “Applied Geophysics and Underground Surveys”, Master’s Degree in “Applied Geological Sciences”, University of Pavia.
- 2014-2015-present teaching of “Terrestrial Physics and Geophysics”, Bachelor's Degree in “Geological Sciences”, University of Pavia.

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

- 2014-2015-present teaching of “Applied Geophysics and Underground Surveys”, Master’s Degree in “Applied Geological Sciences”, 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.

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).

Institutional Assignment

- 2009-present, Superintendent of the 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-present, Delegate of the head of the didactic council “Scienze Geologiche” of the University of Pavia for the university guidance - undergraduate and graduate program.
- 2013-present, 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).
- 2014-present, Supervisor of the MIUR funded project “Piano Nazionale Lauree Scientifiche”, Dipartimento di Scienze della Terra e dell’Ambiente of the University of Pavia PLS-L34 – UniP..
- 2015-present, 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.

Examinations 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.

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.

Public Engagement

- 2011-present, 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 workshop “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 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 workshop “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 workshop “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 of the workshop “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 of the workshop “Il terremoto del centro Italia: cause ed effetti geologici”, Università di Pavia.
- 2017, Member of the Organizing Committee and Chairman of the workshop “L’esplorazione dei Fondali Marini nel Mar della Cina Meridionale a bordo della Joides Resolution”, videoconferencing with the scientific crew on board of IODP, Expedition 367 from South Indian Sea, Università di Pavia.

Consulting Projects, Agreements and Contributions to Research Funds

- 2009, “Reflection Seismic Data Processing with Innovative Techniques”, 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 Innovative Techniques”, 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 Innovative Techniques”, 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 Innovative Techniques”, 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 Innovative Techniques”, 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, Savio 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.

Publications

Author of 54 publications on international and national journals and conferences proceedings.

For further information, please connect to:

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

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

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Pavia, 25 May, 2017

Patrizio Torrese