



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Valeria Vignali**

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Nationality Italian

Actual position

2010 Assistant Professor at the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM), School of Engineering and Architecture, University of Bologna.

Education

From 2010 Assistant Professor at the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM), School of Engineering and Architecture, University of Bologna.

2007-2010 Research Assistant at the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM), School of Engineering and Architecture, University of Bologna.

2003-2006 Ph.D. in Transportation Engineering at the University of Bologna.

2002 Master degree in Civil Engineering at the University of Bologna 110/110 cum laude.

Academic responsibilities

From 2018 Ordinary Member of the Academic Board of the PhD Program in Civil, Chemical, Environmental and Materials Engineering (Coordinator: Luca Vittuari).

From 2017 Ordinary Member of the Civil Engineering Erasmus Commission of the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM).

From 2015 Ordinary Member of the Board of the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM).

From 2010 Ordinary Member of the Research Committee of the Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM).

Affiliation to scientific societies

From 2017 Ordinary Member of the Board of the Italian Society of Transportation Infrastructures (SIIV).

From 2016 Ordinary Member of the Italian Association for the transportation and traffic engineering (AIIT).

From 2013 Ordinary Member of the Committee CT 2.2 "Improvement of urban mobility" of the World Road Association (AIPCR).

From 2003 Ordinary Member of the Italian Society of Transportation Infrastructures (SIIV)

Scientific activities

Main areas of research

- Road Safety Analysis, road design consistency, road design and human factor interaction;
- Distinct Particle Elements modelling of bituminous mixtures and asphalt binders;
- Methodologies for fast surveying and analysis of damage phenomena in road and airport pavements;
- Reduction techniques for environmental impact of road and airport pavements.

Department research agreements

- AlfaEvolution Technology spa: Effects on driving task and road safety impact induced by the usage of Adaptive Cruise Control and Lane Keeping.
- Alstom Ferroviaria SpA: A risk assessment method for "Eurobalise" fastening system;
- api SpA: Finalized study for the quality control of bitumen prepared according to the api technology;
- api SpA: On site performance characterization of a special pavement undergoing intense traffic and designed with api technology;
- api SpA: Performance characterization of bituminous mixtures prepared with api technology;
- Autovie Venete SpA: Maintenance and requalification of the Villesse - Gorizia crosslink.
- CGS Consolidamenti SpA: Improvement and Stabilization of materials for subgrades and foundations.
- Consorzio Cave Bologna Soc. Coop: Valorization of waste materials in construction ones.
- Ecopneus ScpA: Cold Recycling of waste aggregates with rubber from scrap tires.
- G2B srl: Characterization of the bonding properties of the Ecosand B product for the construction of stabilized natural soils.
- Isoltema SpA: Application of bituminous sealants in the road construction;
- Province of Forli-Cesena: Monitoring of the Road Safety within the Integrated Project for road safety of a urban stretch of SP4 "Del Bidente"- Ex SS310 in the Municipality of Meldola (FC);
- Province of Bologna: Kinematic analysis of traffic-calming devices foreseen in the safety improvement project of the SP 610 "Selice-Montanara".
- Siteco Informatica srl: Study of a surveying and analysis methodology for the quantification of the structural and functional deterioration of a road pavement.
- Slurry Italia srl: Performance characterization of the Continuous Reinforced waterproofing system (IAC): tests for waterproofing and direct shear resistance of the interface.
- Strada dei Parchi SpA: Planning of the needed interventions for the resolution of the hydraulic issues arisen in the Torano - Avezzano stretch of motorway;
- CORECOM SRL: Analysis of the stress-strain behavior of asphalt mixtures with Evizero
- FIS IMPIANTI INTERRATI srl: Study of the mechanical behavior of asphalt mixtures containing C&D recycled materials.

Awards

- Best Paper Award of the section "Road and Airport Infrastructures" of the 4th international SIIV congress (Palermo, 12- 14 September 2007), for the paper "Flexible pavement simulation with Distinct Particle Element Method";
- Best Paper Award of the section "Recycling and use of industrial by-products" of the seventh International Conference on Maintenance and Rehabilitation of Pavements and Technological Control (Auckland (New Zealand), 28 - 30 August 2012), for the paper "A new "Frugal" approach to road maintenance: 100% recycling of a deteriorated flexible pavement";
- Overall Best Paper Award of the seventh International Conference on Maintenance and Rehabilitation of Pavements and Technological Control" (Auckland (New Zealand), 28 - 30 August 2012), for the paper "A new "Frugal" approach to road maintenance: 100% recycling of a deteriorated flexible pavement".

Reviewing activities for International journals with IF

Advances in civil engineering journal; Applied science; Coatings; Construction & Building Materials; Current psychology; International Journal of Injury Control and Safety Promotion; International Journal of Pavement Engineering; Journal of Civil & Environmental Engineering; Journal of engineering and technology research; Journal of environmental research and public health; Journal of infrastructure systems; Journal of injury control and safety promotion; Materials; Materials and design; Modeling in materials and structures; Multidiscipline Modeling in Materials and Structures; Powder Technology; Safety Science; Sustainability; Transport (ICE); Transportation Research Part F: Traffic Psychology and Behaviour.

Scientific Committees of National and International Congresses

- IV International SIV Congress "Advances in Transport Infrastructures and Stakeholders Expectations" (Palermo, 12-14 September 2007);
- V International SIV Congress "Sustainability of Road Infrastructures" (Roma, 29-31 October 2012);
- International Symposium on Design and Practice of Geosynthetic - Reinforced Soil Structures (Joint Sessions with 26th Italian National Conference on Geosynthetics)" (Bologna, 14-16 October 2013);
- 3rd International Conference on Transportation Infrastructures - ICTI 2014 (Pisa, 22-25 April 2014).
- AIIT International Congress on Transport Infrastructure and Systems - TIS 2019" (Roma, 23-24 September 2019).

Teaching activities

- "Railways and airport constructions M", 2nd cycle degree programme in Civil Engineering, University of Bologna.
- "Railways and airport constructions with laboratory", degree programme in Architecture and Building Engineering, University of Bologna.
- Supervisor of more than 100 master and degree theses.